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RAILWAY AGE

THE STANDARD RAILROAD WEEKLY FOR ALMOST A CENTURY

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FEBRUARY 9, 1953

● The Burlington's new Kansas City Zephyrs and American Royal Zephyrs, serving Chicago-Kansas City-St. Joseph, were built by Budd. Of all-stainless steel construction for safety, reliability and maintenance economies, these trains offer vista domes, and a wealth of luxuries and conveniences that will attract traffic and assure a profitable service.
The Budd Company, Philadelphia 15.

Budd

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Nalco Spray Cars, engineered to give precision chemical dosage and coverage, are added good reasons for using safe, powerful Nalco weed and brush control chemicals on your right-of-way.

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Six Nalco Spray Cars shown above have all gone into service within the past two years. Modern design, equipment and instrumentation assure maximum spraying control and labor-saving efficiency.

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MINER CLASS L-3 SAFETY LOCKING PIN

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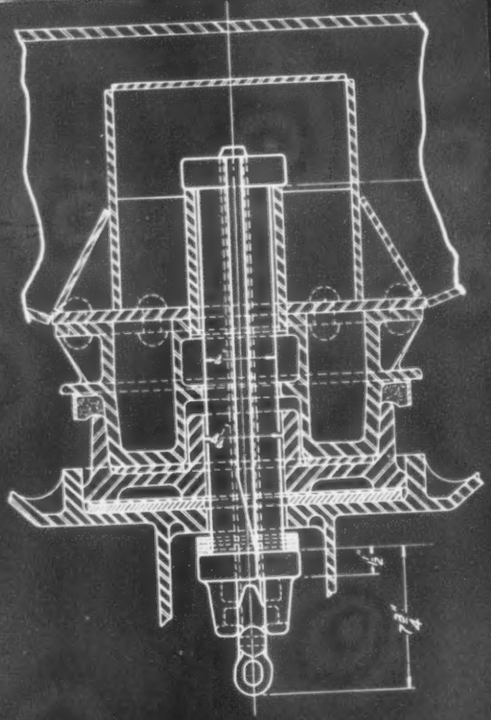

Typical application of
Miner Class L-3 Safety Locking Pin

the Burlington's new Budd-built
KANSAS CITY ZEPHYRS and **AMERICAN ROYAL ZEPHYRS**
are equipped with

MINER SAFETY LOCKING PINS

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Notice how high lift and heft are combined in this Caterpillar HT4 Shovel. Perfectly balanced, this unit is loading 1 to 1½ tons of coal per shovel into railroad cars on a siding near Canton, Illinois. Averaging 50 trips per hour over a 50-foot haul, it delivers 550 to 600 tons production per 8-hour day.

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EARTHMOVING EQUIPMENT

Vol. 134, No. 6 February 9, 1953

RAILWAY AGE

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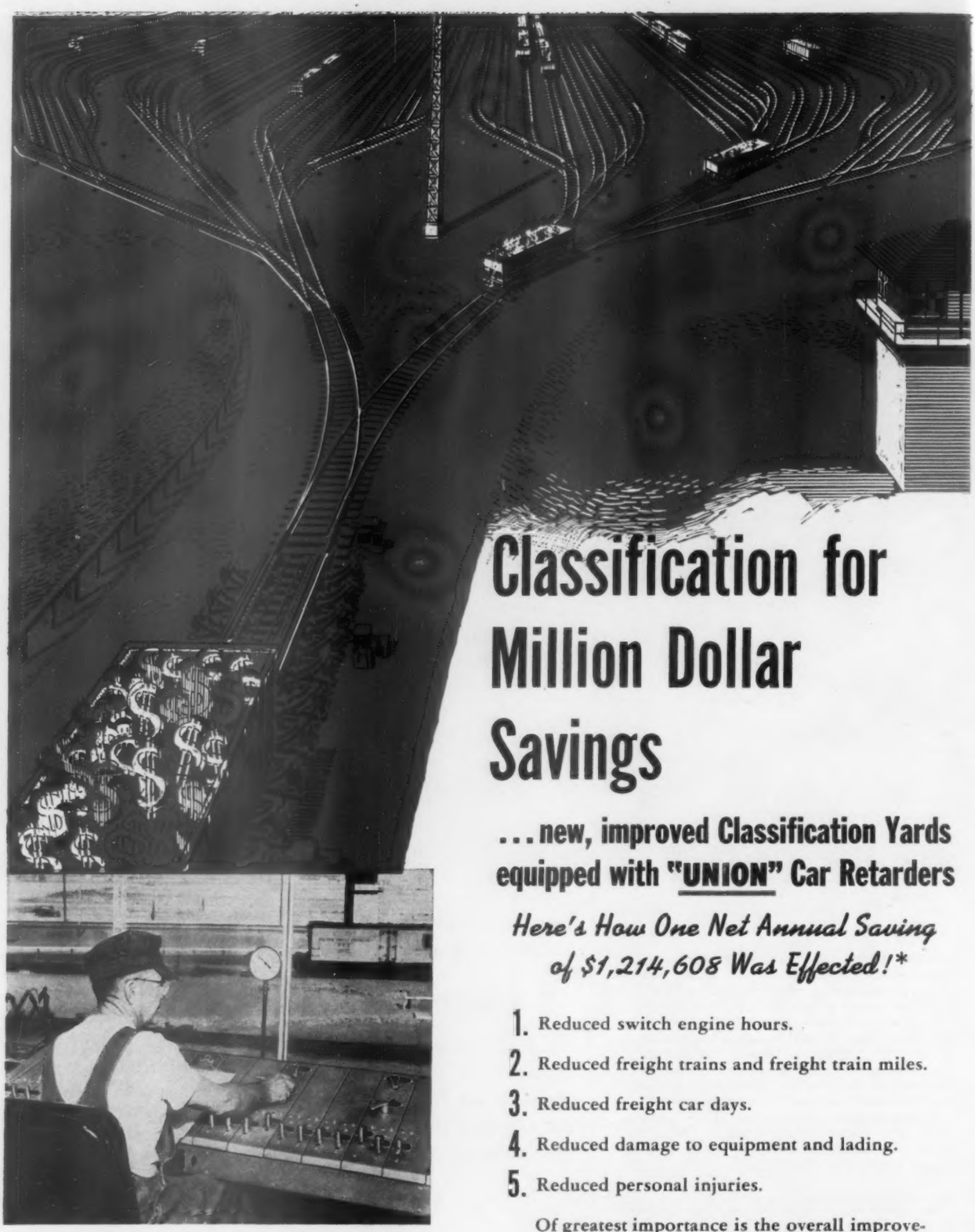

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WEEK AT A GLANCE

CURRENT RAILWAY STATISTICS

Operating revenues, eleven months
1952 ..... $9,646,357,451
1951 9,489,714,254

Operating expenses, eleven months
1952 ..... $7,341,636,162
1951 7,369,948,055

Taxes, eleven months
1952 ..... $1,169,580,294
1951 1,100,804,634

Net railway operating income, eleven months
1952 ..... $ 964,041,996
1951 832,132,965

Net income, estimated, eleven months
1952 ..... $ 678,000,000
1951 567,000,000

Average price railroad stocks
February 3, 1953 ..... 69.64
February 5, 1952 ..... 55.92

Car loadings, revenue freight
4 weeks, 1953 2,654,437
4 weeks, 1952 2,830,501

Average daily freight car surplus
January 31, 1953 69,965
February 2, 1952 7,106

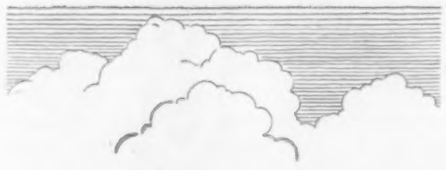
Average daily freight car shortage
January 31, 1953 1,727
February 2, 1952 4,387

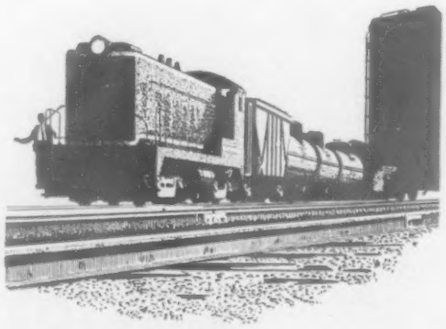
Freight cars delivered
December 1952 7,845
December 1951 8,458

Freight cars on order
January 1, 1953 80,296
January 1, 1952 123,947

Freight cars held for repairs
January 1, 1953 93,027
January 1, 1952 95,425

Average number of railroad employees
Mid-December 1952 1,223,163
Mid-December 1951 1,243,095





In This Issue . . .

NEW RAILROAD, NEW TRAINS, NEW SERVICE! That's the story of the Burlington's new Kansas City Short-Cut between Brookfield, Mo., and Birmingham, which is 22 miles shorter than the old line via Cameron Junction. What the $16-million project involved, and how it was built, are briefly summarized on pages 74-76; included therein are references to earlier *Railway Age* articles which described in greater detail specific features of its construction. The new through passenger services between Chicago and Kansas City-St. Joseph, which the new line has made possible, are detailed beginning on page 71. And starting on page 77 is a copiously illustrated description, complete with floor plans, of the Burlington's new passenger cars—most of which are used on the new "Kansas City" and "American Royal Zephyrs," but some of which are assigned to some of the "Q's" other name trains.

A PROPOSED MAHAFFIE ACT reorganization plan for the Missouri Pacific . . . Elimination of the Canadian strike threat by settlement of trainmen's wage demands; but continuation of the Chicago Great Western strike . . . A Central of Georgia announcement of a plan for expenditure of $18 million for 3,000 freight cars over a three-year period . . . Death of Frederick H. Prince . . . Application for an increase in express rates—are some of last week's developments which are recorded in this issue's news columns.

SIDE LOADING OF HIGHWAY TRAILERS on flat cars may soon be a reality, according to an announcement in this week's news pages. The Van-Car Corporation, of Chicago—a wholly owned subsidiary of Rail-Trailer—has announced plans to build 500 flat cars especially designed for the handling of loaded highway semi-trailers, all the new cars to be equipped with a new side-loading device.

In Washington . . .

OFFICIAL-TERRITORY RAILROADS WILL GET a larger share —and Southern and Southwestern railroads a smaller share—of revenues on traffic moving between their respective territories under the I.C.C.'s decision in the more-than-five-year-old divisions case. While there was no official estimate of the amount involved, one of the opinions in the case indicated that it would be between $37 and $42 million per year.

AN OIL COMPANY'S THREAT to build a pipe line justifies, says the I.C.C. —but only by 6-to-5—a 40 per cent rate cut on petroleum products moving

WEEK AT A GLANCE

into Arizona from El Paso and Los Angeles. It would seem, from this distance at least, to be taking the sensible course of avoiding unnecessary duplication of transport facilities—though there were some truck operators in the affected territory who, apparently, would rather see their traffic go to a new pipe line than to existing railroads—judging, that is, by their opposition to the rate cut.

THE FUTURE of the Express Agency; 18 recommendations for legislation (most of them reiterations of earlier recommendations); questions as to "traffic-getting" practices; and a denial that there has been any undue delay in settlement of rate cases highlighted the just-released report of the Interstate Commerce Commission, for the 12 months ended last October 31. The report itself is summarized, beginning on page 86.

. . . And Elsewhere

ONE OF THE FAVORITE propaganda tricks of spokesmen for those long-haul commercial truck operators who directly compete with railroads is to claim credit for all taxes paid, all work done, all services rendered, by all trucks, including the thousands of useful small vehicles performing light local jobs, which are in no way competitive with railroads. The essential difference between heavy over-the-road trucks and the many other types of trucks is one on which railroad men ought to be fully informed. Hence, we appreciate the privilege of reprinting, on page 70, excerpts from an article by R. J. Littlefield, which appears in the current issue of the Pennsylvania Railroad magazine, The Pennsy.

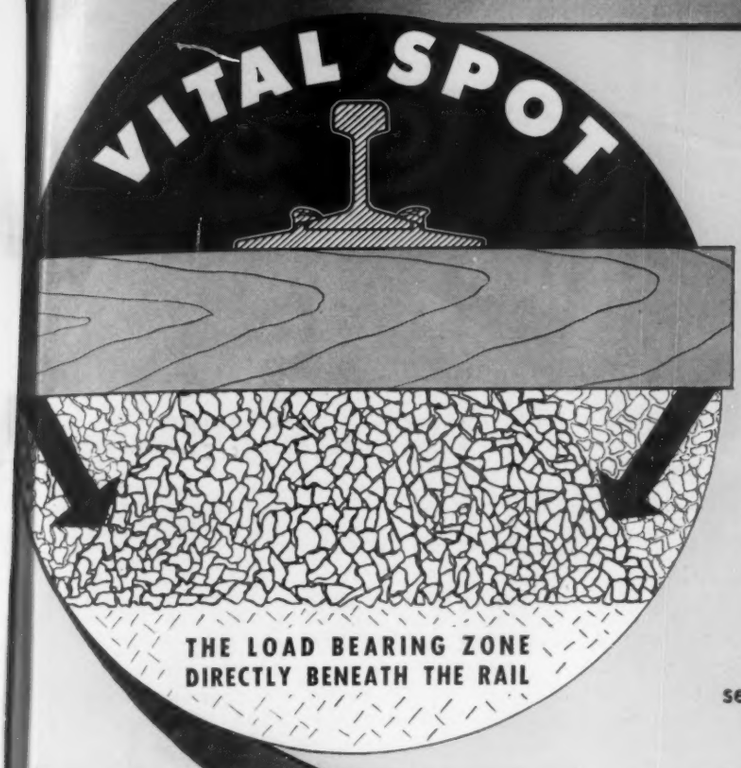
A LARGE-SCALE BUILDING PROJECT, apparently not unlike New York's Radio City, has been proposed for the site of the Pennsylvania's former Broad Street Station (and adjacent railroad property) in Philadelphia. Plans are said to envision four office buildings, a 900-room hotel, a shopping center, and garage parking facilities for 1,800 automobiles, with all buildings connected underground with the PRR's nearby Suburban Station and city transit lines. Walter S. Franklin, Pennsylvania president, is said to have described the proposal as "very attractive," while emphasizing that there is as yet no definite commitment.

UNDER SECRETARY of Commerce for Transportation in the new Eisenhower administration is Robert B. Murray, Jr., above. As this issue's news story on Mr. Murray's confirmation by the Senate states, he has been, since 1946, president of the Pennsylvania Economy League —an organization which works for "efficiency and economy" in government. In his new post, Mr. Murray told a Senate committee, he will "neither have nor care to have" any regulatory authority over any form of transportation.

A REFRESHING CORPORATE HISTORY which contains no charts, no statements or resolutions by the board of directors, no aerial photos of plants, and no pictures of products or patriarchs, but which reads like a novel and is illustrated with humorous sketches, is "Sand in Their Shoes," the story of the first 50 years of American Steel Foundries, soon to be published.

BEFORE HE LEFT THE MONON to become a vice-president of the New Haven, John W. Barriger traveled over the entire railroad, making it a point to stop and speak to every employee possible, and to thank him for his individual contribution to the continuing efforts to make the Monon a better railroad. A special train—often with Mr. Barriger riding in the cab—stopped wherever an employee could be found. At interlocking towers, where the Monon's line is crossed by other railroads, Mr. Barriger often telephoned the dispatcher of the other line to thank him for his past cooperation and solicit its continuance for the days ahead. The trip, which consumed two days, included stops at every open station, shop, tower or office.

THE PERFECT BUILD-UP



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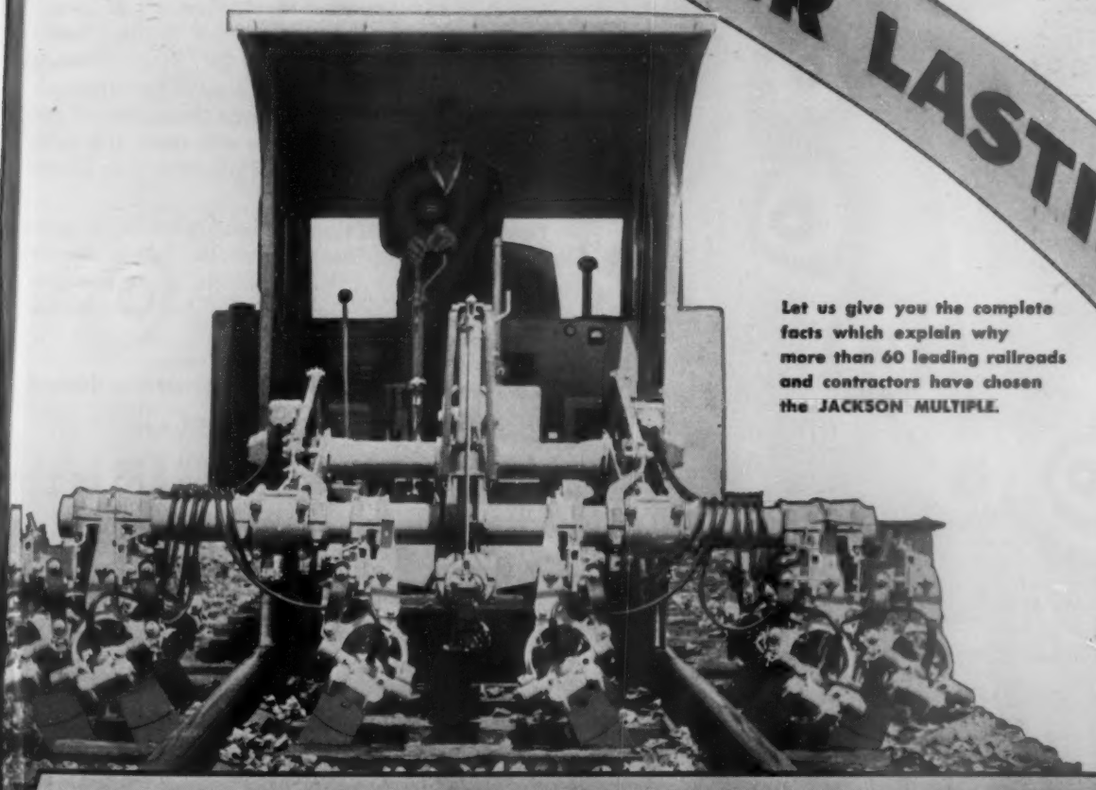
THE *ONLY* ON-TRACK MACHINE THAT TAMPS THE VITAL SPOT

Obviously, track which has thoroughly consolidated ballast directly beneath the rail — the area in which greatest stress is imposed — is bound to remain smooth, require less maintenance and last longer. In selecting your on-track tamping machines, it is well to bear in mind that the JACKSON MULTIPLE is the ONLY ONE that reaches and thoroughly tamps this vital spot. Furthermore, in any lift, ranging from that which is slightly less than the average size of ballast used, to the very highest, JACKSON MULTIPLES will give you perfect track at unprecedented low cost per mile . . . in one operation regardless of type of ballast used.

FOR LONGER LASTING TRACK



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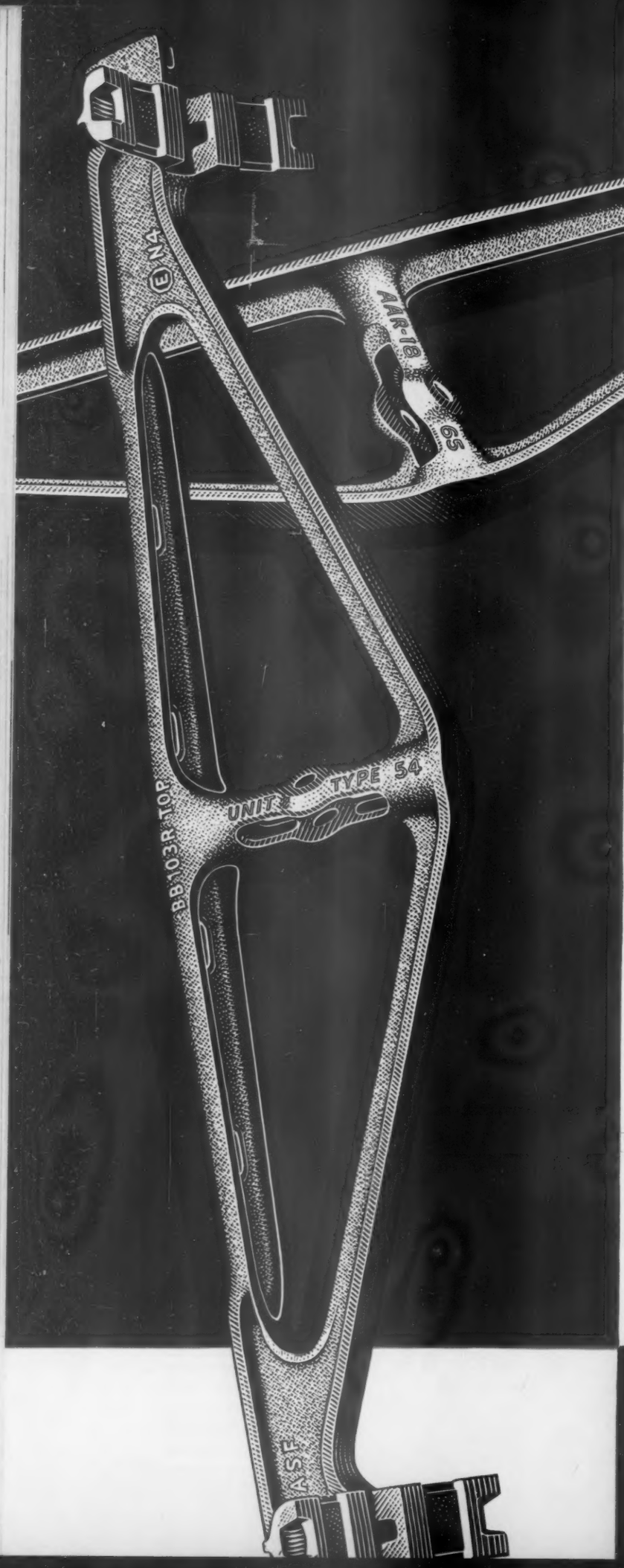

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A.S.F. Cast-Steel Brake Beams can reduce your costs per car mile!

The real cost of any brake beam is the cost of maintenance and replacement. That's why it pays to consider these facts about ASF Cast-Steel Unit or Hanger Type Brake Beams:

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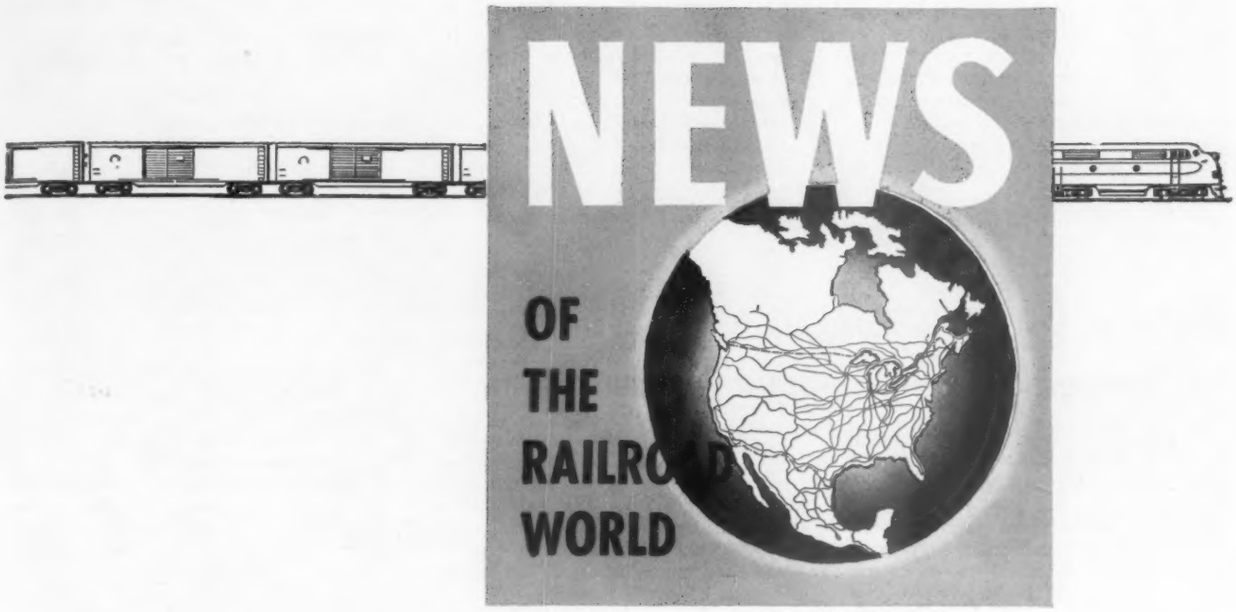


I.C.C. Decisions in Divisions Cases Will Shift Revenues to Official-Territory Roads

Railroads in Official territory will receive larger shares of joint rates on traffic moving between that territory and the South and Southwest as a result of recent decisions of the Interstate Commerce Commission.

While the commission's majority reports contained no estimates as to the amount of revenues that will be shifted, Chairman Alldredge filed dissenting-in-part expressions in which he said that Official-territory lines will get from $37,000,000 to $42,000,000 in additional revenues annually. The Alldredge figures indicate that $25,000,000 to $28,000,000 of that will come from railroads in Southern territory, and $12,000,000 to $14,000,000 from roads in Southwestern territory.

The proceedings out of which the commission reports came were docketed as No. 29885, Official-Southern Divisions, and No. 29886, Official-Southwestern Divisions. Both were investigations instituted by the commission on its own motion more than five years ago—on December 4, 1947. The commission's actions, however, came after Official-territory roads had filed petitions seeking such inquiries.

The division bases prescribed in both reports embody equal prorating factors, i.e., for Official and Southern lines in the one case and Official and Southwestern lines in the other. Prorating factors of present bases, which have been in effect since 1940, are weighted in favor of Southern and Southwestern lines.

Thus, the prospective shift of revenues under the new bases which must be established on or before April 1.

The order in No. 29885 applies to joint class and commodity rates between Official and Southern territories, except those on coal and on coke made from coal. The order in No. 29886 applies to all Official-Southwestern rates.

The commission determinations that the prorating factors should be equal were based on findings to the effect that territorial cost differentials were no longer present to justify "inflation" of Southern and Southwestern factors. Also, the commission rejected contentions that Official-territory lines were operated less efficiently than roads in the other territories. As one of the reports put it, the figures "disprove the charge."

"Growth" Evidence Dismissed

The commission dismissed with brief comment the "considerable amount of evidence" presented by "expert witnesses" for each contending group of railroads in its undertaking "to prove that the region it serves has far less favorable potentialities for economic growth and consequent railroad prosperity than its opponent's territory." The brief comment, embodied in both reports, was this:

$3,000 ADDED TO AWARDS FOR PAN AM. CONGRESS PAPERS

Three additional cash awards totaling $3,000 for railroad technical papers prepared for the Eighth Pan American Railway Congress have been announced by the organizing committee of the congress. These awards bring to about $15,400 the 13 cash prizes now available to authors of papers on railroad subjects to be presented at the congress, which will be held in Washington, D.C., and Atlantic City, N.J., in June.

The Electro-Motive Division of General Motors has offered a $1,000 prize for the best paper on design, application, operation and/or maintenance of diesel-electric locomotives.

The United States Steel Company has offered a prize of $1,000 for the outstanding paper on factors in selection of weight of rail for new or rehabilitated lines.

A prize of $1,000 has been offered by the National Malleable & Steel Castings Co. for the best paper on couplers and draft gears covering development and standardization of draw gear assemblies.

Papers on these three subjects should be submitted in triplicate by February 28 to Dr. Lewis K. Sillcox, vice-chairman of the board, New York Air Brake Company, Watertown, N.Y., who is chairman of the papers committee of the congress. A single technical paper is eligible to receive only one of the prizes of United States donors, the organizing committee said.

"As each group has pointed out, the note of self-depreciation stressed in this testimony is in contrast with the promotional optimism frequently voiced by railroad officials in concert with the commercial organizations of their respective regions. It seems unnecessary to discuss this evidence in detail or to attempt to use it. . . ."

In his dissenting-in-part expressions, Chairman Alldredge said he would have modified the prescribed division bases to cut the amount of shifted revenue to about 60 per cent of that which the majority determination will divert to Official-territory lines.

Commissioners Lee and Johnson joined in the Alldredge expressions. The dissent of Commissioner Splawn was noted on both reports.

Mediation Board Tells Congress It May Want To "Reexamine" Emergency-Board Procedures

Congress has been advised by the National Mediation Board that it may find it necessary to "reexamine" the Railway Labor Act's emergency-board provisions unless those provisions can be "revitalized" and emergency-board recommendations raised to a stature where they "again command respect." The advice was embodied in N.M.B.'s annual report for the fiscal year ended June 30, 1952.

The report blamed the "lack of mobilization of public opinion behind the reports" of emergency boards for the development of conditions under which the act's emergency-board procedures (section 10) have become "less and less effective." And it attributed the lack of opinion mobilization to "lack of widespread publicity and understanding of the issues involved" in emergency-board cases.

In its further discussion of the problem, N.M.B. said that six emergency boards were created during the fiscal year under review. "In only one of these six instances was the dispute settled on the basis of the emergency-board recommendations," the report added. It also had this to say:

"Such recommendations [in the other cases] were useful only as the basis for further negotiations or mediation efforts looking toward a settlement. . . . As it has been used in the past few years, section 10 . . . has resulted only in an additional delay of 60 days or more before the parties finally find it necessary to settle their dispute in direct negotiations, usually under the auspices of this board or the Executive branch of the government."

Meanwhile, the board also had some advice for the carriers and employees covered by the act. It was this: "After all, there is no satisfactory substitute for the time-tested method of settlement through mediation or voluntary arbitration, and the board hopes that these means will be more generally resorted to in the future."

As it did in a previous report, N.M.B. went on to refer to "the practice of a few organizations setting strike dates on short notice, sometimes only after brief negotiations, on issues which are proper subjects for mediation." The board "regrets to note again several recent instances of this nature," the report added, and then said:

"This procedure has the practical effect of forcing immediate mediation efforts under the emergency provisions of section 5 . . . which in turn delays mediation service on other cases already standing on the board's docket. In most instances of this sort the issues are such that could and should be handled through the orderly procedure of invoking mediation under section 6. . . . The board and its staff are now prepared to handle promptly all applications for its services, and a return to the orderly processes of the law is recommended to the few organizations which have recently again indulged in this practice."

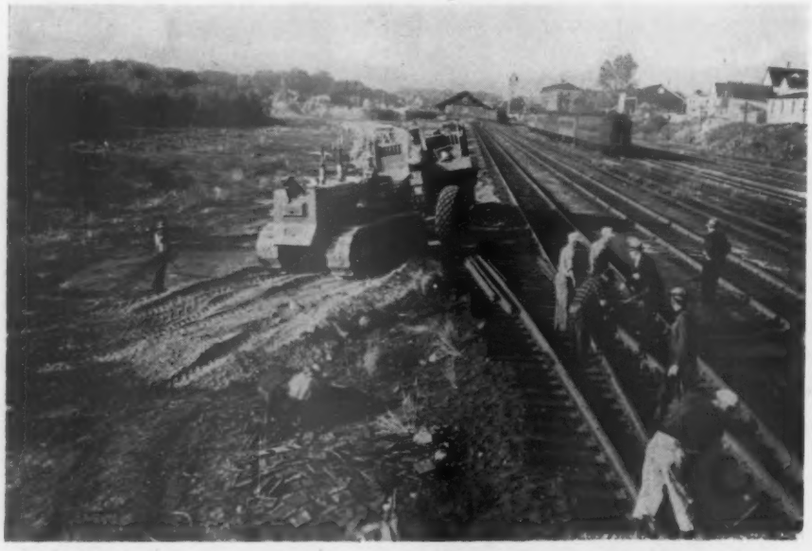
During the fiscal year under review, there were 17 strikes involving carriers and employees under the board's jurisdiction. Employees of air lines were the strikers in four cases while the other 14 were railroad strikes. For the previous fiscal year, the board had reported a record number of strikes—24, including three on air lines and 21 involving railroads or railroad affiliates.

500 FLATS FOR TRAILERS TO BE BUILT BY VAN-CAR

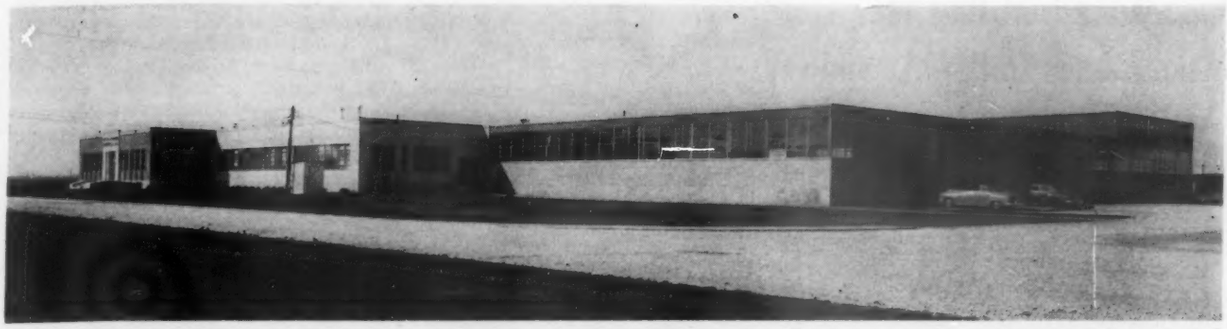
Plans for construction of 500 flat cars especially designed and equipped for accommodation of loaded highway semi-trailers have been announced by the Van-Car Corporation of Chicago —a wholly owned subsidiary of the Rail Trailer Company. Construction and financing details are reported to be about complete. The 72-ft. cars will be roller-bearing equipped, and will be able to handle two standard 32-ft. highway semi-trailers. Each car will be equipped with a newly-designed side-loading device which will do away with the necessity of circus-style loading over end ramps, greatly simplifying the terminal problem.

When completed, the new cars will be available for lease to railroads for their own use in moving loaded highway semi-trailers, the Rail Trailer Company announced.

The Defense Production Administration has granted the Van-Car Corporation a certificate of necessity calling for 70 per cent fast tax amortization of the estimated $6 million cost over a five-year period.



BUILDING A NEW ROADBED through a low region on the river side of the Maine Central's terminal at Portland, Me. The present tracks that link the road's Mountain division with the terminal are carried on a long trestle that is directly in the path of the approach to a $7-million vehicular bridge that is projected across the inner harbor of Portland. The trestle must be moved and the line changed prior to the bridge construction. Although only 2,500 ft. of track are being relocated, more than 84,000 cu. yd. of earth and gravel must be moved. The grading is being handled under contract, and is being carried out with two International TD-18 crawler tractors pulling large scrapers and one International TD-24 tractor used both with a scraper and as a bulldozer.



THE TWENTY-FIRST PLANT of Gould-National Batteries, Inc., this $3-million structure at Kankakee, Ill., has gone into production of industrial and automotive storage batteries, following a series of "open house" inspection tours for community, civic, and business leaders of the area. Located on a 30-acre site, the new plant will eventually employ about 300 persons. It is the fifth new plant to be established in the company's $7-million postwar improvement program. Others have been opened recently at Monroe, Mich., Fort Erie, Ont., and Calgary, Alta.

There were also in fiscal 1952 "a number of threatened work stoppages which were averted by the efforts of" N.M.B. and "the appointment of Presidential emergency boards," the report said. The board's general appraisal was that its efforts to maintain peace on the railroads and air lines had "met with a reasonable degree of success" during the year.

As to the practice of creating strike situations in grievance cases within the jurisdiction of the National Railroad Adjustment Board, which was "prevalent a few years ago," the report said it has now "almost entirely disappeared." Only one such instance came to N.M.B.'s attention during the year.

"The board," the report continued, "notes with full approval the recent tendency to create special boards of adjustment to handle and finally dispose of these time claims and grievance dockets, and is hopeful that this trend will continue."

Pipe Line Threat Leads To Railroad Rate Cut

An oil company's threat to build a pipe line has been accepted by a majority of the Interstate Commerce Commission as the basis for approving a railroad rate cut on petroleum products moving into Arizona from El Paso, Tex., and Los Angeles, Cal.

The rate reduction, which Commissioner Knudson placed at 40 per cent, was authorized over the opposition of motor carriers. The latter contended the low rail rates would drive them out of business. The reduced rates will apply on refined petroleum products and distillage fuel oils, in tank-car loads.

This "paper pipe line" controversy arose when the Texas Company, with a refinery at El Paso, decided to begin supplying Arizona points from El Paso instead of California. Standard Oil of California made similar plans. The Texas Company proposed to build a pipe line westward to Tucson, Ariz., and Phoenix, and Standard announced it would use this facility, also.

Convinced that the pipe line threat was "real," the railroads negotiated with the oil companies to determine whether lower rail rates would hold the traffic on the rails. The oil companies informed the railroads of the rates they would consider satisfactory as an alternative to building the pipe line.

The railroads agreed to make the reductions. To maintain historical relationships, they extended the reductions to oil traffic moving from the Los Angeles basin to Arizona points.

The I.C.C. suspended the proposed new rates upon objection by motor carriers. The truckers asserted ratemaking to remove a pipe line threat was "novel and unlawful," and charged that the new rail rates were "unreasonably low and unjustly discriminatory."

The International Brotherhood of Teamsters, Chauffeurs, Warehousemen and Helpers joined in the opposition. The union said approval of the railroad proposal would result in loss of employment of approximately 291 tank-truck drivers who haul petroleum products from the Los Angeles basin to Arizona.

Six members of the commission found the record "persuasive" that the proposed rail rates were no lower than necessary to meet the threatened pipeline competition. They said the evidence relating to the proposal to build a pipe line from El Paso "poses a real threat" to continued participation in this traffic by rail and motor carriers.

Commissioner Knudson wrote a dissent in which he called the pipe line threat "a Damoclesian sword"—railroads have no assurances that the lower rates will forestall construction of the pipe line even for 12 months, he said. In fact, he added, there is evidence that the pipe line would actually be more economical, and the question arises of whether the I.C.C. should deprive the public of a more economical form of transport.

Tank-truck lines, which now haul petroleum products in the area, will be unable to compete and will go out of business, the commissioner said. He said the majority decision does not accord these truckers a fair chance when it allows railroads to set rates so low they can be justified only on the premise that they will return something more than out-of-pocket costs.

Commissioners Johnson and Arpaia endorsed Mr. Knudson's statement, while Chairman Alldredge and Commissioner Lee noted separate dissents. This oil case was docketed as I. & S. No. 6010.

Hook, Allen Appointments Confirmed by Senate

The Senate on January 29 confirmed President Eisenhower's appointment of Charles R. Hook, Jr., to the position of deputy postmaster general.

At the time of his appointment(Mr. Hook was vice-president—personnel of the Chesapeake & Ohio (*Railway Age*, January 26, page 54).

Also on January 29, the Senate confirmed the President's appointment of John C. Allen to the position of assistant postmaster general. At the time of his appointment, Mr. Allen was general traffic manager of Sears Roebuck & Co.

CAR SURPLUSES, SHORTAGES

Average daily freight car surpluses and shortages for the week ended January 31 were announced by the Association of American Railroad on February 5 as follows:

	Surplus	Shortage
Plain Box	12,448	1,246
Auto Box	109	26
Total Box	12,557	1,272
Gondola	5,213	135
Hopper	42,260	131
Covered Hopper	476	0
Stock	6,448	0
Flat	287	144
Refrigerator	2,352	0
Other	372	45
Total	69,965	1,727

Railroad Advertising Men Make Awards to E.-M.D. and G.E.

The Electro-Motive Division of General Motors Corporation and the General Electric Company came in for top honors at the annual meeting of the Association of Railroad Advertising Managers, held at the Greenbrier, White Sulphur Springs, W.Va., January 22-24. A heavy docket consumed most of the three-day meeting, with approximately 90 members and guests present. Among topics discussed were surveys; "morning radio"; window displays; the family fare and group economy plan for stimulating passenger traffic; Pullman service; the public relations program of eastern railroads; public relations advertising; making a railroad movie; freight advertising; and industrial location advertising.

New officers for the A.R.A.M., and its retiring president (left to right): Alex W. Robertson, advertising manager, Missouri Pacific, secretary; Carlton T. Sills, advertising and publicity manager, Denver & Rio Grande Western, vice-president; Fred Q. Tredway, general advertising manager, Southern Pacific, retiring president; Leo A. Brown, director of advertising and public relations, Wabash, first vice-president; Chester C. Dilley, advertising manager, Chicago, Milwaukee, St. Paul & Pacific, incoming president; Donald W. Wallace, assistant manager, department of public relations, Canadian Pacific, vice-president; and Charles D. Perrin, formerly advertising manager of the Burlington and now with Poole Bros., Chicago, assistant secretary. Not shown in the picture is the treasurer, Harry F. Tate, advertising agent, Missouri-Kansas-Texas.

Top awards for advertising programs which help create a better understanding of the importance of railroads and encourage development of railroad traffic were conferred by railroad advertising managers upon the Electro-Motive Division of General Motors Corporation and the General Electric Company. E.-M.D. took first place in the "traffic" category and G.E. in the "institutional" category. Shown (left to right) are: Volney B. Fowler, director of public relations, E.-M.D.; Carlton T. Sills, vice-president of A.R.A.M.; Fred Q. Tredway, retiring president of A.R.A.M.; and Earl B. Dunckel, in charge of railroad product advertising, G.E.

At the annual banquet, awards were made for the second annual advertising competition, sponsored by A.R.A.M., which was open to any advertiser and any campaign in newspapers, magazines or other recognized media between November 1951 and October 31, 1952.

Awarded to Volney B. Fowler, director of public relations of E.-M.D., was an engraved brass plaque for advertising in behalf of the railroads in the "direct traffic development" category. To Earl B. Dunckel, in charge of railroad product advertising for G.E., went the top-ranking plaque for "institutional" advertising. A certificate of honorable mention in the first category went to the Chase National Bank of New York and in the institutional category jointly to the American Locomotive Company and General Electric, as manufacturers of Alco-G.E. locomotives. Mr. Dunckel also accepted the latter.

A.R.A.M. emphasized that its officers and members did not make the awards; that responsibility is given to outside judges. Purpose of the competition is to "encourage advertisers to augment individual and collective efforts of railroad advertisers in creating a better understanding by the public of the importance of railroads in the American transportation scheme," and for "encouraging development of additional rail traffic."

In accepting the award for E.-M.D., Mr. Fowler reviewed the "tie-in" advertising his company has placed in the past. Indicative of the natural appeal of railroading to the public is the fact that E.-M.D.'s wartime advertising —which had to ignore encouragement of passenger travel—regularly received 10 points higher in audience reception ratings than the advertising of suppliers to the so-called "glamour boy" of industry—aviation.

"Third-Party" Pleading

Mr. Fowler asserted that "a third party pleading" is far more effective than any degree of "first party boasting." He said the aim of his company is to get railroads in the public consciousness " as a necessary force in a good life for the people of this country." He suggested that railroads urge some of their suppliers into doing a better job for them. Here the job is to convince a production-minded industrialist that it is to his own interest to be concerned "whether trains run or not."

William H. Schmidt, Jr., executive editor of *Railway Age*, outlined what he conceived to be opportunities in the passenger business and the railroad advertising officers' part in such a program. He analyzed the particular psychological blocks which now exist on railroads toward a whole-hearted encouragement of passenger service,

and attempted to suggest how those obstacles could be overcome.

With regard to institutional advertising, the speaker expressed the opinion that "the railroads' program would be relatively easy to put over if pressure for socialism in transportation originated only with liberals, the lunatic fringe, or New Dealers and their ilk, because the country has just repudiated their policies.

"But the fact is that the chief backers of public expenditures on transportation facilities—without compensation from the users, the general taxpayer picking up the tab—are business and regional organizations which hope to gain some artificial advantage thereby," he said. As an example of this, Mr. Schmidt cited the St. Lawrence Seaway. Large industries, he said, which first opposed the project on the grounds that it smacked of socialism later changed their minds when new sources of raw material were discovered which made the seaway seem advantageous to them.

Productivity Wage Rise Absurd for RRs—Franklin

Proposed increases in wages of railroad employees based on productivity are an "absurd requirement for a regulated industry to meet," Walter S. Franklin, president of the Pennsylvania, said in Pittsburgh on January 29. Speaking at the annual dinner meeting of the Pittsburgh Traffic Club, Mr. Franklin added: "We already have adjustments in effect that have taken into consideration what is alleged to be increased productivity, but which we believe have been developed largely from improvements in motive power, equipment, signaling, etc." Increases sought would add $54,000,000 to the PRR wage bill on an annual basis, he emphasized.

Railroads believe, the PRR chief executive continued, that a slight change should be made in federal regulatory laws "so duties of regulatory bodies may be directed more towards regulation, prevention of discrimination, etc., and not so much towards the managerial functions which they have assumed in many instances." He said laws should be altered "so as to remove control of the Interstate Commerce Commission on the effect of rates on movement of traffic."

Stalemate on Great Western Strike Issues Continues

"Our railroad is willing—and has been willing—to submit the issues involved to a board or referee for impartial, speedy and final determination. If the railroad and the unions cannot agree on the members of such a board, or on a referee, we are willing to leave the appointment to the President of the United States."

That, in brief, is the position of the Chicago Great Western's management on the question of resolving the more than 600 unsettled grievances over which striking members of six operating unions brought all operations of the line to a halt on January 25 (*Railway Age*, February 2, page 16). The statement, published in a number of on-line newspapers, was over the signature of CGW President W. N. Deramus, III. The ad, which appeared on February 2, went on to say that "continued refusal to present their claims to an impartial board or referee strongly suggests that the unions have no confidence in the merits of their claims." The statement characterized the unions' position as "boiling down to the blunt proposition that they propose to be sole umpires of their own demands and alleged grievances. . . ."

Four of the striking unions—the Brotherhoods of Railroad Trainmen, Locomotive Engineers, and Locomotive Firemen & Enginemen, and the Order of Railway Conductors—made public a telegram sent to Chairman Francis A. O'Neill, Jr., of the National Mediation Board by their respective chiefs. The wire stated: "In view of the adamant position taken by carrier representatives in direct negotiations and mediation proceedings, we find it impossible to convince ourselves that the strikers should be asked to return to work until management and our assigned representatives can reach definite agreement with respect to the manner in which detailed disputes will be handled to a conclusion with view of satisfactory settlement of all of them."

Presidents A. J. Glover of the Switchman's Union of North America and M. G. Schoch of the Railway Yardmasters of America later voiced agreement with the statement.

At press time for this issue, a spokesman for the road said there was "no significant change" in the stalemate, but we are working toward a solution night and day."

Financier Dies at 93

Frederick H. Prince, 93, financier, who amassed a fortune in banking, railroads and other industries, died on February 2 in Biarritz, France, of influenza.

In the 1890's, Mr. Prince developed the Chicago Junction Railway, which he later leased to the New York Central System for 99 years at an annual rental of $2 million. He was president of the Pere Marquette in 1903, and had been interested also in the Boston & Maine, the Bessemer & Lake Erie and the Ann Arbor.

At the request of the late President Franklin D. Roosevelt, Mr. Prince, with a staff of 50 persons, worked out a plan which called for grouping the nation's railroads into seven sections to be operated by a central organization. The plan was never adopted, after labor unions and some railroad operators opposed it.

He opened his own brokerage office, Frederick H. Prince & Co., in Boston in 1885. The firm, which installed the first stockticker in Boston, moved in 1928 to Providence, R. I., where it remains.

At the time of his death Mr. Prince was president and director of the Chicago Stock Yards Company; director and member of the executive committee of Armour & Co.; director of the Live Stock National Bank and chairman of the board of the Union Stock Yard & Transit Co.

Freight Car Loadings

Loadings of revenue freight in the week ended January 31 totaled 697,616 cars, the Association of American Railroads announced on February 5. This was a decrease of 25 cars compared with the previous week; a decrease of 33,602 cars, or 4.6 per cent, compared with the corresponding week last year; and an increase of 46,451 cars, or 7.1 per cent, compared with the equivalent 1951 week, when railroad switchmen were on strike.

Loadings of revenue freight for the week ended January 24 totaled 697,641 cars; the summary for that week, compiled by the Car Service Division, A.A.R., follows:

REVENUE FREIGHT CAR LOADINGS
For the week ended Saturday, January 24

District	1952	1951	1950
Eastern	125,140	128,677	144,255
Allegheny	145,553	150,847	162,420
Pocahontas	51,870	62,756	61,275
Southern	128,712	136,279	140,263
Northwestern	77,816	70,877	83,545
Central Western	110,058	116,256	126,524
Southwestern	58,492	62,323	65,884
Total Western Districts	246,366	249,456	275,953
Total All Roads	697,641	728,015	784,166
Commodities:			
Grain and grain products	45,184	49,528	53,939
Livestock	8,040	8,580	8,891
Coal	127,509	160,419	163,204
Coke	15,685	16,201	16,208
Forest products	43,088	42,522	50,278
Ore	20,364	18,178	18,136
Merchandise l.c.l.	67,380	70,625	81,613
Miscellaneous	370,391	361,962	391,897
January 24	697,641	728,015	784,166
January 17	705,479	747,660	779,750
January 10	688,232	744,710	783,015
January 3	563,085	610,116	662,427
Cumulative total 4 weeks	2,654,437	2,830,501	3,009,358

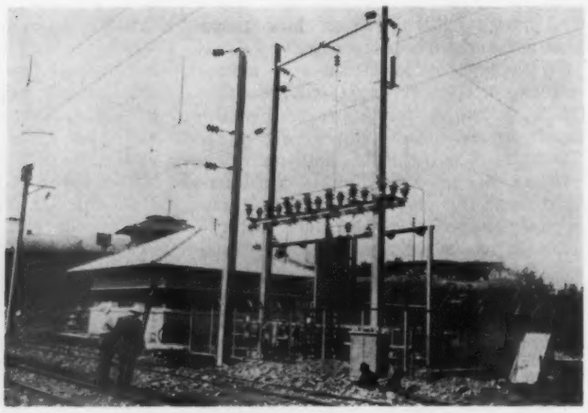
In Canada.—Carloadings for the seven-day period ended January 21 totaled 73,390 cars, compared with 72,048 cars for the previous seven-day period, according to the Dominion Bureau of Statistics.

	Revenue Cars Loaded	Total Cars Rec'd from Connections
Totals for Canada:		
January 21, 1953	73,390	31,283
January 21, 1952	76,770	36,124
Cumulative Totals		
January 21, 1953	201,303	84,667
January 21, 1952	216,024	100,101

REA Seeks Approval Of New Rate Increase

The Railway Express Agency has petitioned the Interstate Commerce Commission for authority to increase rates and charges "so as to provide additional revenues to eliminate losses incurred by the railroads in transporting express traffic."

REA asked for authority to boost



Photographs by H. F. Brown, consulting engineer, Westinghouse Electric International Company.

A 22,000-VOLT, 50-cycle locomotive and substation on the recently electrified Bas Congo au Katanga Railway in the Belgian Congo, Central Africa. This electrification was described in *Railway Age* December 15, 1952, page 75.

current first-class rates by $1.04 to $1.05 per 100 pounds. Applied on a mileage-block basis, the increases range from 5.09 per cent to 42.98 per cent.

Second-class rates would be increased to 75 per cent of the new first-class scale. A minimum charge of $2.30 would apply on all shipments.

The express agency also proposed a 25 per cent increase on commodity rated traffic; valuation charges; C.O.D. service charges; storage charges; empty containers returned; money classification rates and charges; various merchandising classification rates and charges; carload rates on fruits, vegetables and other perishable traffic; carload shipments subject to class rates, and international rates between the United States and Canada.

"Daily newspapers, milk and cream and human remains" were specifically exempted from the proposed rate increase.

R.E.A. asked the commission to institute an investigation of existing rates and charges "at the earliest possible date." The agency said the shortage in express revenues of Class I railroads exceeded $70,000,000 in 1952.

Senate Approves Murray For Commerce Position

The appointment of Robert B. Murray, Jr., to be Under Secretary of Commerce for Transportation was confirmed by the Senate on January 26. Mr. Murray succeeds Jack Garrett Scott.

The new under secretary has been president of the Pennsylvania Economy League since 1946. This is a privately financed organization working for efficiency and economy in government—the largest such organization in the country, according to Mr. Murray.

Mr. Murray appeared before the Senate Interstate and Foreign Commerce Committee on January 23. Among other things, he told the group he "certainly will" bring into the new job his ideas about economy in government. Senator Bricker, Republican of Ohio, questioned Mr. Murray about whether he would have any "regulatory authority" over any form of transportation. Mr. Murray replied: "No, sir, I neither have any nor do I care to have any."

Mr. Murray was born at Hampstead, Md., January 31, 1911. He attended Mercersburg Academy in Pennsylvania, and was graduated from Harvard in 1934. He served in the Air Force in World War II, and left the service in 1946 as a colonel. Before the war he was with investment banking houses in New York and Baltimore. A picture of Mr. Murray appears on page 8.

Norfolk Wharfage Case Reopened by the I.C.C.

The Interstate Commerce Commission has reopened the so-called Norfolk Wharfage case "for further proceedings consistent with" the court decision which reversed the commission.

The reopening order assigned the case (No. 29117) for prehearing conference at Washington, D. C., on February 25. Examiner E. R. Diamondson will preside.

The case involves the federal government's complaint against discontinuance by the railroads of wharfage allowances on freight moving over Norfolk, Va., piers after such piers were taken over by the army during World War II. The I.C.C. upheld the railroads' action, but that ruling was set aside by the courts (*Railway Age*, December 1, 1952, page 15).

Senate Group Gets More Time for Study of I.C.C.

The Senate has extended until June 30 the time within which the Interstate Commerce Committee may complete its study of the Interstate Commerce Commission's organization and operations.

This extension was granted as the Wolf Management Engineering Company filed a report based on a six-month survey of the I.C.C. The management firm conducted its study under contract for the Senate committee.

Senator Tobey, Republican of New Hampshire and chairman of the Senate group, called the Wolf report "an important milestone" in the life of the commission.

"I commend the Wolf report to the I.C.C. as a thorough analysis of its administrative problems," Senator Tobey said. "Adoption of its recommendations," he said, "should do much to promote more efficient and more effective performance of its many and varied duties.

"I can assure the commission that in its implementation of the proposed administrative changes it will receive the sympathetic cooperation of this committee," the senator added. "I also will call the attention of the House Committee on Interstate and Foreign Commerce and the two Appropriation Committees to the recommendations."

Recommendations contained in the Wolf report included a suggestion that "all administrative functions" of the I.C.C. be placed in the hands of a managing director. The director would be named by the commission and would have full authority over all civil service rated personnel of the agency.

Another recommendation in the report called for consolidation of existing I.C.C. bureaus into "three general staff offices—Administration, Law, Secretary—and six specialized administrative bureaus—certificates and finance, traffic, hearings, transport services, safety inspection and accounts and statistics."

Nine other proposals made by the Wolf firm covered the following:

(1) Organize I.C.C. field operations under six geographic regions, with a "regional manager" in charge of each.

(2) Delegate more "regulatory authorities" from the commission to qualified boards of employees, subject to specific reservations and with the commission or its divisions as the place for appeal.

(3) Establish a "section for management procedures and controls" in the new office of Administration.

(4) Form an "operations staff council" under the managing director, and provide for regular meetings of the group. Membership of this group would consist of managers of staff offices, directors of bureaus and the I.C.C. secretary.

(5) Extend the policy of appointing "special-

ized technical review committees" to review and guide the work of I.C.C. "administrative bureaus."

(6) Realign budget accounts to correspond with these proposed changes.

(7) Develop personnel programs giving increased recognition to personnel management; and recruit and train personnel to replace the "large segment" of key persons ready to retire.

(8) Employ specialized transportation consultants to initiate and develop policies and programs which may influence the regulatory and administrative activities of the commission.

(9) Increase the I.C.C. staff immediately by 30 examiners and approximately 15 steno-clerks, to be reduced over a two-year period as older employees retire.

The survey made by the Wolf firm was authorized by Senate Resolution 332, passed by the Senate on June 26, 1952. It was sponsored by Senator Johnson, Democrat of Colorado, who at that time was chairman of the Senate Interstate Committee (*Railway Age*, June 16, 1952, page 16).

The resolution passed by the Senate January 30 has the effect of extending the life of S.Res. 332 for five more months. No additional funds were authorized.

Newman and Coakley Resign from D.T.A.

Samuel L. Newman, director of the Manpower Division, Defense Transport Administration, resigned effective January 31. Gordon R. Hathaway, a member of the division, has been named acting director to succeed Mr. Newman.

Mr. Newman joined D.T.A. in February 1951, and served as director of the Manpower Division from June of that year. He came to D.T.A. after retiring as general vice-president of the International Association of Machinists for the Northeastern states.

John P. Coakley has resigned as director of the Inland Water Transport Division, and William G. Gregg has been appointed acting director of the division.

Mr. Coakley had been director since December 1951. He will continue to serve as consultant, "as occasion requires," the D.T.A. announcement of his resignation said.

Tariff Study Group Sends Out 17th Questionnaire

The Railroads' Tariff Research Group has sent out the seventeenth in the series of questionnaires whereby it is seeking views of interested parties on ways and means of simplifying and otherwise improving tariffs.

Questionnaire No. 17 asks: Should special supplements related to suspended matters, i.e., "suspending," "postponing," "vacating," "cancelling" supplements, be self-indicative and immediately distinguishable from regular supplements? If so, which of two methods of distinguishing them is preferable?

The two methods are the printing on colored paper and the so-called "crosshatching" method. The latter involves the placing of distinctive legends on the right margin of the title page.

Questionnaire No. 17 was the first issued since last fall. A spokesman for the group explained that the questionnaire program was suspended at that time to permit the staff to assimilate and use returns from the previous questionnaires. He also said that tariff-making specifications, responsive to the views and preferences of the majority of tariff users polled, are now being framed, and that participating tariff-making establishments will soon receive a further report from the group as to the final returns on each questionnaire and as to the disposition of each matter in issue.

California Supreme Court To Review Rail Decision

In response to a petition by the Southern Pacific, the California Supreme Court has ordered issuance of a writ of review as to decisions by the California Public Utilities Commission which involve, among other things, passenger train service between San Francisco Bay cities and Sacramento.

The court will review commission decisions rendered last May and June which denied the road permission to discontinue mid-day local passenger trains between San Francisco and Sacramento and dealt with certain local passenger facilities of the railroad.

RR Management Forum Offered by Northwestern

Designed for railway officers and members of their staffs, a 16-week railroad management forum will be started by Northwestern University's School of Commerce on February 12. Meeting each Thursday evening at Wieboldt Hall on the Chicago campus, registrants will hear talks by railway leaders on a wide variety of management problems.

Stanley Berge, professor of transportation and director of the course, will speak on "Staff Work in Railroad Management." Others scheduled to appear are E. F. Ryan, president of the Rail-Trailer Company, Chicago; G. Murray Campbell, vice-president of the Baltimore & Ohio; and Downing B. Jenks, vice-president of operations, Chicago, Rock Island & Pacific. A special address by Lewis K. Sillcox, vice-chairman of the board of the New York Air Brake Company, entitled "Future Freights," to be presented on February 19, will deal with the question of coordinated railroad and highway freight service. This session will be held in Thorne Auditorium, to accommodate anyone within the railroad industry who wishes to attend. Other classes, however, will be open only to registrants in the course.

Mr. Ryan will lead a seminar discussion on "A Business Formula for Road-Rail Coordination." Mr. Campbell will present a lecture and supervise subsequent discussion on "Careers in Railroading," and Mr. Jenks will cover "Electronics in Railroad Operations."

Other topics slated for discussion include: Diesel and gas turbine locomotives; freight car supply and distribution; recent improvements in yard design and operation; belt lines—current policies and developments; sales promotion in passenger service; freight car design and testing; recent aspects of railroad financing; freight traffic problems and policies; railroad public relations; and economics, technology and the "Suburbaliner."

Tank Car Order Backlog Was 4,658 on January 1

Car builders had a backlog of 4,658 tank cars on order at the beginning of this year, the Defense Transport Administration said last week. During 1952, a total of 6,371 tank car units were completed and assigned to service. The 1952 total included cars built for domestic service, export and for the Defense Department.

A.A.R. Authorizes Vote On Higher Reefer Rentals

The board of directors of the Association of American Railroads, at its January 30 meeting in Washington, D. C., authorized a vote on proposed increases in mileage rates on refrigerator cars.

The vote will be by letter ballot, the voters being subscribers to the Bulwinkle-Act agreement covering car rentals and demurrage.

The proposal is that the mileage rate on general-purpose reefers be raised from 3.5 cents to 4 cents, and that the rate on RB type reefers be raised from 3.2 cents to 3.5 cents. The present rates have been in effect only since

NEW MEMORIAL ESSAY CONTEST ANNOUNCED

The New York Railroad Club has announced its fifth successive yearly Roy V. Wright Memorial Essay Contest. Essays may be devoted to "any subject calculated to make for improved railroading—that is, better service, greater efficiency, higher profitability, less onerous regulatory restraints, fairer competitive conditions, more satisfactory employee relations, more modern technology, more attractive pricing, etc.," according to the club. The contest is named in honor of the late managing editor of *Railway Age*.

First prize will be $750, with second and third prizes of, respectively, $500 and $250. The contest closes next June 30. Entries and inquiries should be addressed to C. T. Stansfield, executive secretary, New York Railroad Club, 30 Church street, New York 7.

January 1 (*Railway Age*, December 15, 1952, page 12). The further increases now proposed were recommended by the general committee of the A.A.R.'s Operating-Transportation Division.

O'Neill Continues On Mediation Board

Francis A. O'Neill, Jr., last week began a new, three-year term as a member of the National Mediation Board. He was reappointed by President Eisenhower on January 29 and confirmed by the Senate on February 2.

When the nomination was called up in the Senate, that body's majority leader—Senator Taft of Ohio—said there had been no objection to the nomination and that Mr. O'Neill's work on N.M.B. had been "highly spoken of." The nomination had been reported favorably on January 30 from the Senate committee on labor and public welfare, of which Mr. Taft is a member.

Mr. O'Neill is N.M.B.'s Republican member. He has been on the board since March 1947, and is serving as chairman for the current fiscal year which ends June 30. His new membership term will expire February 1, 1956.

Canadian Strike Off

A strike order called against Canadian railroads by the Brotherhood of Railroad Trainmen was cancelled following resumption of negotiations between the carriers and union representatives. The strike had been scheduled to begin February 2. A compromise settlement, worked out at railroad-union meetings in Ottawa after a series of breakdowns in talks at Montreal, gave the union a 12 per cent wage increase and other concessions, most of which were along lines the roads had proposed in recent negotiations (*Railway Age*, February 2, page 16).

Before settlement was reached, Prime Minister St. Laurent had hinted to the disputants that the government might invoke emergency powers to forestall a strike.

Terms of the settlement include: (1) A 12 per cent general increase for members of the B.R.T., which includes some employees not working trains, effective February 1, with a retroactive date to be negotiated later. (The union originally had asked for a 35 per cent boost, and in later stages of negotiations had been holding out for discussions to begin on the basis of a 20 per cent recommendation of a conciliation board minority report. The 12 per cent recommendation was that of the majority of the conciliation board.) (2) A 40-hour work week for yard workers, effective next October 1. (3) No escalator clause in the new contract. (The union had wanted to hitch wages to increases in a cost-of-living index.) (4) Changes in operating rules to be subject to further negotiations.

ORGANIZATIONS

Bi-monthly list of Meetings and Conventions appears on page 105.

February 14 marks the end of the first 100 years of rail service from the Great Lakes to the Ohio River, and on that date, the **National Railway Historical Society** will officially open the Ohio Sesquicentennial with a re-creation of the first train on that line. Costumes symbolic of the year 1853 will be worn by the crew, and at Wellsville a modern "William Wells" will drive a Golden Spike to complete the program.

The **Eastern Car Foreman's Association** will hold its next meeting in Room 502, Engineering Societies building, 29 West 39th street, New York, on February 13, at 7:45 p.m. G. A. Mundt, supervisor, Association of American Railroads Billing Bureau, New York Central System, will speak on "1953 A.A.R. Interchange Rules." A buffet supper will be held at 6 p.m. in the Old Timers Grill, 7 East 40th street, New York.

EQUIPMENT AND SUPPLIES

FREIGHT CARS

The **Central of Georgia** plans to purchase 3,000 freight cars over a three-year period at a cost of $18,000,000. The first 1,000 units will be 50-ton box cars with wide doors for transporting paper, clay and other products, loading machinery for which requires wide-door openings. Their cost is estimated at $6,000,000 and delivery is expected next fall. The remaining 2,000 cars will be bought in 1954 and 1955. The CofG also will buy this year an unspecified number of heavy-duty flat cars, costing about $25,000 each.

The **Gulf, Mobile & Ohio** has ordered 400 50-ton high-side gondola cars with fixed ends from the American Car & Foundry Co. Delivery of the cars, which are to be provided with steel flooring and chilled tread iron wheels, is expected to begin in the third quarter of 1953.

The **Pacific Fruit Express Company** has received authorization from its joint owners—the Union Pacific and the Southern Pacific—to acquire 200 new 50-ft. refrigerator cars. Of the total, 100 cars will be mechanically refrigerated for handling frozen foods at near-zero temperatures. Delivery is expected at the year's end.

The **Savannah & Atlanta's** directors have authorized purchase of 200 freight cars at an estimated cost of $1,200,000.

LOCOMOTIVES

To complete dieselization of the **New York Central** will require expenditure of approximately $225,000,000 for additional diesel units, William White, president, said at a press luncheon in New York on February 2. The NYC soon will be in the market for diesels for 1954 delivery, he added, which will involve an outlay of approximately $20,000,000.

SUPPLY TRADE

Fred W. Rusch, who until recently headed sales operations in Brazil for the **Sherwin-Williams Company** has been appointed assistant manager of the company's Atlantic Coast transportation zone, at 92 Liberty street, New York.

The **R. E. Dietz Company** has purchased the fixed assets, plant and inventory of the **Embury Manufacturing Company,** Warsaw, N.Y. In making the announcement, Gerry J. Dietz, president of the Dietz firm, said: "Soon all manufacturing operations will be concentrated in our Syracuse factory. . . . The Warsaw plant will be offered for sale. Certain of the personnel of the Embury engineering department and sales staff will join the Dietz company."

(Continued on page 89)

H. C. Allington, who has been elected vice-president in charge of sales of the Eastern division of the Colorado Fuel & Iron Corp., with headquarters in New York. He will supervise sales in the division of all products manufactured by Colorado Fuel & Iron and its subsidiaries. Mr. Allington has been general manager of sales of the Wickwire Spencer Steel division since October 1947.

AMERICA'S most complete line of SWITCH STANDS

RACOR

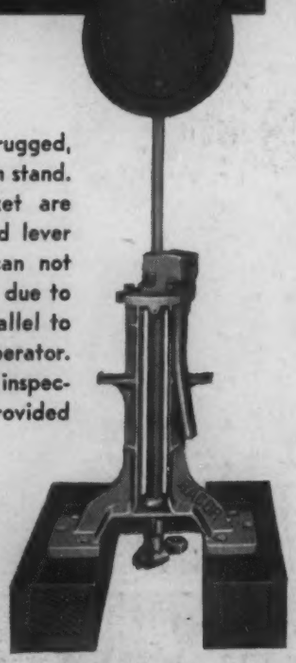
FOR MAIN LINE or YARD USE
HIGH or LOW TYPES
FOR RIGID or AUTOMATIC OPERATION

STYLE 22 (PATENTED)

STYLE 22 is an extra heavy duty automatic stand recommended for turnouts where switches are apt to be run through. Stand can be hand thrown as well as thrown automatically. When stand is trailed, the switch points are partly opened by the wheel flanges and throw to the opposite position is automatically completed by the stand. During automatic operation the target lamp rotates to indicate position of the switch points while hand lever remains stationary. Separate padlock pedestals will be furnished when specified for application over the integral lever rests if padlocking of hand lever is necessary.

STYLE 112-D

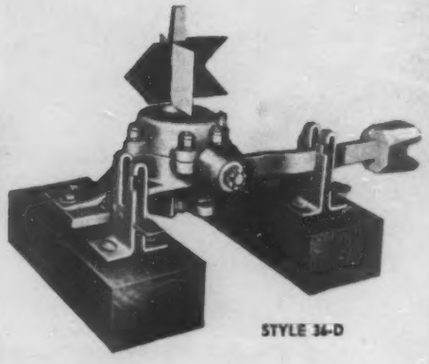
STYLE 112-D is an extremely rugged, column type of MAIN LINE switch stand. Body casting and handle bracket are malleable iron. Spindle and hand lever are forged steel. Hand lever can not become disengaged from bracket due to its novel design. It is thrown parallel to track, thus safeguarding the operator. All parts are easily accessible to inspection and double protection is provided against dropping of spindle.



STYLES 36-D and 36-H (PATENTED)

STYLES 36-D and 36-H are parallel throw gearless stands. Operating parts and base castings are interchangeable and provide a basic assembly for high and low stands. For MAIN LINE or YARD use. No pins to shear. Long life and minimum of lost motion assured by the extra large bearing surfaces of the few heat treated forged wearing parts.

STYLE 36-H



STYLE 36-D

1¾" diameter, forged heat treated adjustable cranks provide strength exceeding that of the strongest rigid type cranks. They permit proper setting of switch points without respiking.

ALL RACOR switch stand designs have been developed from a wealth of knowledge acquired from many years of experience and research in the exclusive manufacture of special track equipment.

AMERICAN Brake Shoe COMPANY

RAMAPO AJAX DIVISION
109 North Wabash Avenue, Chicago 2, Ill.

Illustrated above are but a few of our popular switch stand styles. Write for descriptive literature featuring our complete switch stand line.

LIKE THEIR FAMOUS PREDECESSORS

Denver Zephyr

Twin Cities Zephyr

Nebraska Zephyr

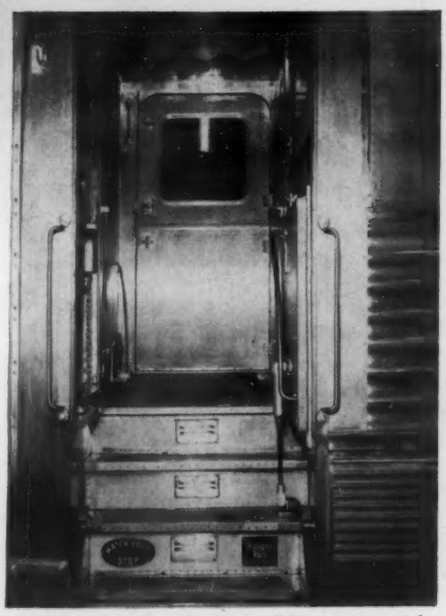
California Zephyr

Burlington's newest

FABRICATION of one of the cars for the new Burlington Zephyrs takes place in the shops of The Budd Company, Philadelphia, Pa. Budd has built 189 all-Stainless Steel cars for the Burlington.

Mark Twain Zephyr | Pioneer Zephyr | Silver Streak Zephyr | Zephyr 9902 | Sam Houston Zephyr | Texas Zephyr

Zephyrs are Stainless Steel



STAINLESS STEEL makes an inviting entrance to these trains and helps to account for the lasting popularity of the Burlington Zephyr fleet.

THIS month, four new Zephyr trains are taking their place in the service of the Chicago, Burlington & Quincy Railroad—the Kansas City Zephyrs for daytime service between Chicago and Kansas City and the American Royal Zephyrs for nighttime service between the same points.

These latest Zephyrs feature the same kind of construction that has been used in every one of these feature trains since the Pioneer Zephyr went into service in 1934. Built by The Budd Company, Philadelphia, Pa., they are constructed entirely of Stainless Steel from the center sill to the roof section.

The attractive, eye-catching appearance of these trains would more than justify this all-Stainless Steel construction. But when you add on all the other advantages—light weight, strength, and resistance to corrosion with its resulting maintenance savings—it's easy to see why the Burlington has taken delivery of 189 of these Stainless Steel cars since 1933.

U·S·S Stainless Steel has been used in these and hundreds of similar cars in service on America's major railroads. This perfected, service-tested material will give the finest performance obtainable, both in fabrication and end use.

UNITED STATES STEEL CORPORATION, PITTSBURGH · AMERICAN STEEL & WIRE DIVISION, CLEVELAND
COLUMBIA-GENEVA STEEL DIVISION, SAN FRANCISCO · NATIONAL TUBE DIVISION, PITTSBURGH
TENNESSEE COAL & IRON DIVISION, FAIRFIELD, ALA. · UNITED STATES STEEL SUPPLY DIVISION, WAREHOUSE DISTRIBUTORS
UNITED STATES STEEL EXPORT COMPANY, NEW YORK

USS

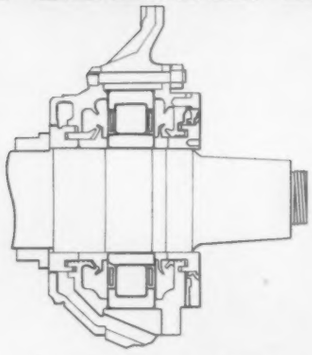
U·S·S STAINLESS STEEL

SHEETS · STRIP · PLATES · BARS · BILLETS · PIPE · TUBES · WIRE · SPECIAL SECTIONS

3-414

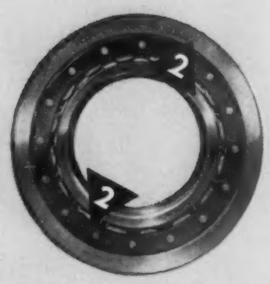
UNITED STATES STEEL

HYATT ANNOUNCES A NEW PINION END MOTOR ARMATURE BEARING

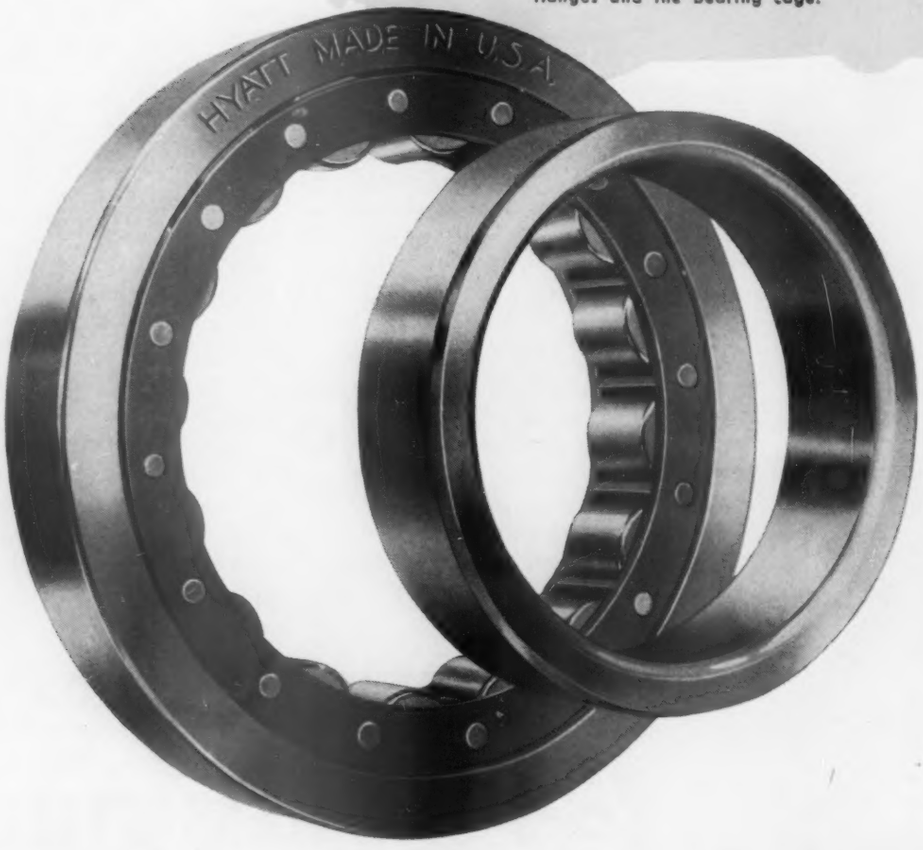


Cross-section of the bearing mounting on the pinion end of a traction motor armature shaft.

Hyatt's new design eliminates all rubbing contact between the race flanges and the bearing cage.

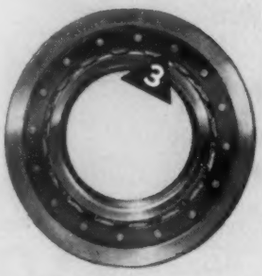


Unrestricted flow of lubricant to all bearing parts is achieved by new cage design.



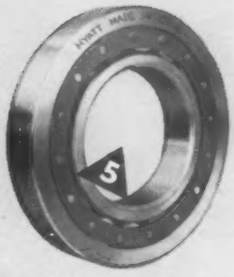
- No rubbing contact between cages and race flanges
- Improves flow of lubrication
- New case-hardened, roller-riding, steel cage
- Safer
- Longer lasting
- Facilitates inspection of all operating surfaces

New Hyatt design answers your need for a safer, longer-lasting, easily-inspected bearing for Diesel Locomotive service



New manufacturing process insures permanent rigidity of cage under operating stresses.

Cage and rollers remove as a unit, permitting complete and easy inspection of all operating surfaces.

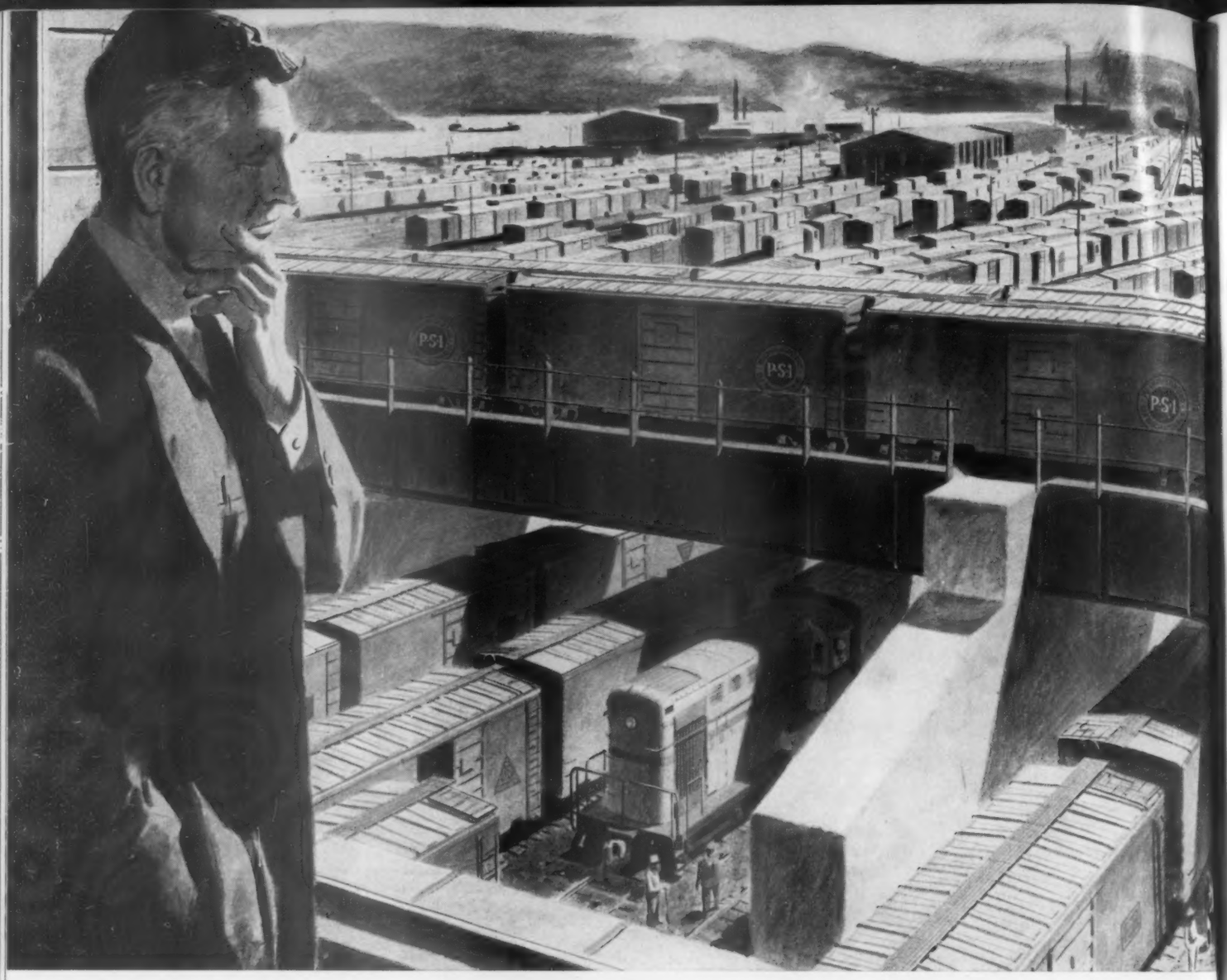


Rings and bars of the new steel cage are heat-treated to give the new bearing greater wear resistance.

A few years ago, Hyatt introduced a high-capacity bearing especially designed for use at the pinion end of traction motor armature shafts. The new bearing featured larger rollers, for additional load-carrying capacity, and a "flange-riding" type of cage. Experience has shown, however, that a "roller-riding" cage would provide additional advantages of longer bearing life and greater safety. So, Hyatt's extensive research facilities were directed toward development of a "roller-riding" cage for use with larger rollers. As a result, Hyatt now has in production a pinion end bearing which combines the advantages of larger rollers and a "roller-riding" cage—with no sacrifice in bearing capacity! The new design practically eliminates the bearing cage as a possible source of difficulty; the bearing is more tolerant of lubricant, and rubbing contact between cage and race flanges is eliminated. These improvements give the new Hyatt pinion end bearings a substantially greater life expectancy at peak efficiency, and they will contribute greatly to longer, trouble-free traction motor performance. Hyatt Bearings Division, General Motors Corporation, Harrison, N. J., Chicago, Ill. and Oakland, Calif.

FOR TRACTION MOTOR ARMATURE SHAFTS

HYATT
ROLLER BEARINGS



THE PROOF IS IN YOUR OWN YARD

The record breaking PS-1 serves the nation's railroads dependably and economically. Look at any freight consist and count the number of PS-1s. Here is the proof that Pullman-Standard standardized box cars are a good answer to the rising costs of today's freight operations. The sturdy PS-1 box car is being bought and reordered by a majority of the country's leading railroads—proof that quality as well as economy leads to the selection of a box car designed for long service life.

STANDARDIZATION MEANS FLEXIBILITY

Steady and high production makes an order for one or 3,000 PS-1s possible and practical for the first time in railroading history. Each PS-1 embodies the advantages of specialized engineering and the economies of continuous production. At the same time, construction and design are flexible enough to allow certain optional features in the PS-1

50,000 PS-1s set the pace

56 RAILROADS PROVE THAT THE PS-1 ANSWERS THE NEED FOR A STANDARDIZED BOX CAR

Single orders have run as high as 3,000 . . . or for just one PS-1. Repeat orders—as many as five times—have come in from some of these 56 railroads. Unless the PS-1 had been designed to meet and beat the requirements of today's changing operating conditions, it could not have gained the leadership it has won in just five years. The PS-1 has earned its acceptance in dependable, day-to-day performance.

While the PS-1 is a standardized box car, its specifications have not been completely "frozen." Design and production are flexible enough to allow certain optional features for individual railroads. This flexibility also permits Pullman-Standard research and "on-line" investigation to continually look for improvements in design and construction, so that railroads can enjoy even greater economies in PS-1 performance.

If you require fast delivery of this outstanding box car—at lower cost—get the facts on the PS-1.

YOUR NEEDS CREATE THE PULLMAN "STANDARD"

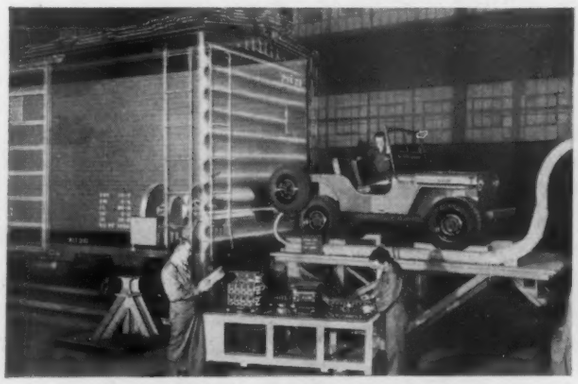
PULLMAN-STANDARD

CAR MANUFACTURING COMPANY

SUBSIDIARY OF PULLMAN INCORPORATED

79 EAST ADAMS STREET, CHICAGO 3, ILLINOIS

BIRMINGHAM, PITTSBURGH, NEW YORK, SAN FRANCISCO, WASHINGTON



RESEARCH AND DEVELOPMENT

Pullman-Standard Research & Development Laboratories reproduce "on-line" conditions encountered at approximately 50 mph to discover possible trouble spots. Two eccentric flywheels mounted over the center sill at the bolster build up a vibration so severe that the lading in the box car leaves the floor. This and other tests results in continuous improvement of the PS-1.

SALES AND SERVICE ENGINEERING

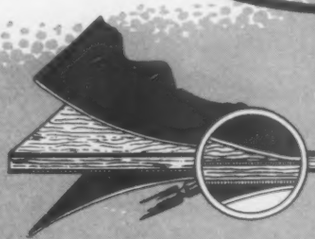
Pullman-Standard Sales and Service engineers travel well over 100,000 miles a year for facts on box car operating conditions. Above: data on truck wheel loadings were used by our Research and Development engineers in designing PS-1 floors to stand up under heavier materials handling equipment carrying heavier loads. All components are thus engineered for dependability.

DOORS • SIDE PANELS
BULKHEADS and PARTITIONS
in This Luxury Car are *73% Lighter*
Than Standard Steel Construction . . .

...because they are **MET-L-WOOD**
METAL BONDED TO PLYWOOD

● Met-L-Wood, used in passenger cars, locomotives and baggage cars cuts deadweight to a minimum consistent with specified strengths, stiffnesses and durability. As an example, Type 2P2-3/8" Met-L-Wood, used in side panels and partitions has the stiffness of 1/4" steel plate—yet weighs only 2.6 lbs./sq. ft. as against 10 lbs./sq. ft. for 1/4" steel plate!

Whether you require prefabricated Met-L-Wood units to your specifications, or can use stock sizes and finishes, the basic utility and economy of Met-L-Wood for railroad rolling stock construction is worth investigating . . . today. Write for details on your specific requirements. Our engineering staff will gladly assist you in adapting Met-L-Wood versatility to your needs.



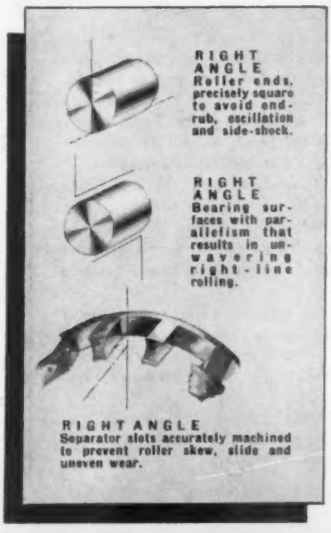
MET-L-WOOD CORPORATION

6755 West 65th Street, Chicago 38, Illinois

MET-L-WOOD · *STRONG... LIGHT... Smooth Finish... Sound Deadening... Fire-Resisting... Insulating*

Every Engine Crew Knows...

When the Pinion Bearing "Goes" the Train Must Stop...*and Quick!*


RIGHT ANGLE
Roller ends, precisely square to avoid end-rub, oscillation and side-shock.
RIGHT ANGLE
Bearing surfaces with parallelism that results in unwavering right-line rolling.
RIGHT ANGLE
Separator slots accurately machined to prevent roller skew, slide and uneven wear.

Squeezed into the tight space between the drivers, the pinion and commutator bearings of diesel-electric locomotives must be both compact and sturdy.

During long hours between lubrications and servicing, they operate under high torque loads and rapid stress cycles . . . complicated by sun, engine-room heat and blower air. If they do overheat and seize, the damage is usually severe.

That's why you'll find Rollway Right-Angle Roller Bearings on a great number of the 21,000 deisel-electric locomotives now in service. Rollway's right-angle precision and right-line rolling hold internal friction and heat to a minimum . . . greatly reduce the hazards of bearing failure and seizure.

ROLLWAY
BEARINGS

Complete Line of Radial and Thrust Cylindrical Roller Bearings

Rollway Bearing Co., Inc.
Syracuse 4, N. Y.

SALES OFFICES

SYRACUSE	CHICAGO
CLEVELAND	PITTSBURGH
HOUSTON	DETROIT
BOSTON	LOS ANGELES
PHILADELPHIA	TORONTO

Streamlite HAIRINSUL
PROTECTS PERISHABLES...
...ON THE MAINLINES...ON SIDINGS...EVERYWHERE!

At any location . . . at any temperature Streamlite HAIRINSUL provides maximum protection to valuable shipments of perishables.

Major refrigerator car builders have been using all-hair insulation for nearly half a century—and today they specify Streamlite HAIRINSUL because of its 40% less weight, higher efficiency and greater economy.

Yes, Streamlite HAIRINSUL assures you all the major advantages listed at the right—and more besides. Write for complete data.

LOW CONDUCTIVITY. Thoroughly washed and sterilized, all-hair heat barrier. Rated conductivity—.25 btu per square foot, per hour, per degree F., per inch thick.

LIGHT WEIGHT. Advanced processing methods reduce weight of STREAMLITE HAIRINSUL by 40%.

PERMANENT. Does not disintegrate when wet, resists absorption. Will not shake down, is fire-resistant and odorless.

EASY TO INSTALL. Blankets may be applied to car wall in one piece, from sill to plate and from one side door to the other. Self-supporting in wall sections between fasteners.

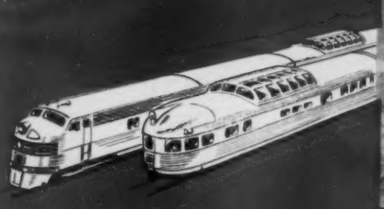
COMPLETE RANGE. STREAMLITE HAIRINSUL is available ½" to 4" thick, up to 127" wide. Stitched on 5" or 10" centers between two layers of reinforced asphalt laminated paper. Other weights and facings are available.

HIGH SALVAGE VALUE. The all-hair content does not deteriorate with age; therefore has high salvage value. No other type of insulation offers a comparable saving.

Sets The Standard By Which All Other Refrigerator Car Insulations Are Judged

Dept. H-32, Merchandise Mart, Chicago 54, Ill.

Burlington introduces Two exciting NEW Vista-Dome ZEPHYRS



Daily between **CHICAGO** *and* **KANSAS CITY-ST. JOSEPH**

De luxe Chair Coaches with adjustable leg rests . . . at thrifty fares

Distinctive Dining Cars . . . delicious meals

Vista-Dome Parlor-Observation Car (on Kansas City Zephyr)

Private Rooms and Standard Berths (on American Royal Zephyr)

Vista-Dome Dinette and Club-Lounge Car

Day or night . . . Burlington's new *Vista-Dome Zephyrs* are your best travel buy between Chicago and Kansas City-St. Joseph. Take your choice:

THE KANSAS CITY ZEPHYR—noon departures, early evening arrivals—for fast fine daytime travel in luxurious parlor observation-lounge or de luxe reclining-seat chair coaches.

THE AMERICAN ROYAL ZEPHYR—late-evening departures and early morning arrivals . . . speedy, restful overnight travel. Private rooms, standard berths, de luxe coaches with reclining seats. Through cars, Chicago-Kansas City, Chicago-St. Joseph.

These sparkling-new stainless steel *Zephyrs* give you added pleasure every mile, every minute. And *Zephyr Vista-Domes* are for everyone—no seats reserved.

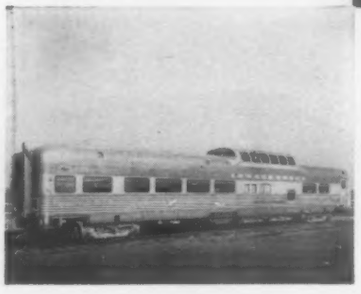
Next trip and every trip between Chicago and Kansas City-St. Joseph . . . ride the *Zephyrs!*

There's no extra fare on ANY Burlington train

Way of the Zephyrs

Burlington Route

Light,
like the
Zephyrs,



and a "breeze" to apply....

ULTRALITE

the long
glass fiber
insulation

Contributing a great deal to the comfort of Burlington's new Kansas City and American Royal Zephyrs is Ultralite glass fiber insulation, selected by the Burlington and the Budd Company to stand guard against heat, cold and sound. Zephyr-light in weight . . . superior in thermal and acoustical properties . . . virtually indestructible . . . easily applied — these were the major reasons why Ultralite was a "natural" for these passenger cars of advanced design.

Budd since 1939 and Burlington since 1940 have used passenger car insulation from Gustin-Bacon. Gustin-Bacon takes pride in this long and pleasant association, and in its "material contribution" to the new Zephyrs that will provide travelers the safest, most pleasant, most comfortable journeys possible.

GUSTIN-BACON MANUFACTURING CO.

210 W. 10th St., Kansas City, Missouri

New York • Chicago • Philadelphia • San Francisco • Los Angeles • Houston
Tulsa • Fort Worth • Detroit • St. Louis

Keeping pace with the Nation's Railroads through research and development — since 1898

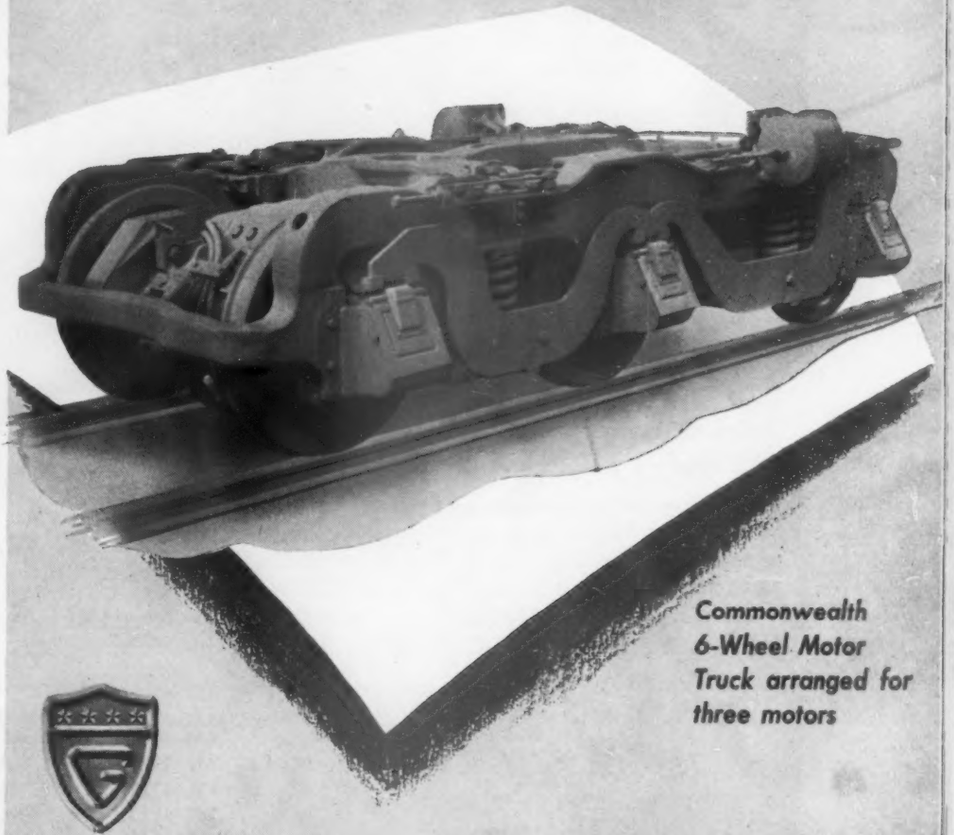
Built by Alco—
1600 h.p. road switcher

A New Development...

COMMONWEALTH 6-Wheel Motor Truck

Riding and performance of road switcher diesel locomotives is improved with a new design of COMMONWEALTH 6-WHEEL MOTOR TRUCK which features a three point suspension arrangement of center plate and loading supports, shorter wheel base and positive equalization. Additional advantages of this new truck permit a lower underframe height from rail, greater accessibility to motors, and lower bearing pressure on center plate and loading supports.

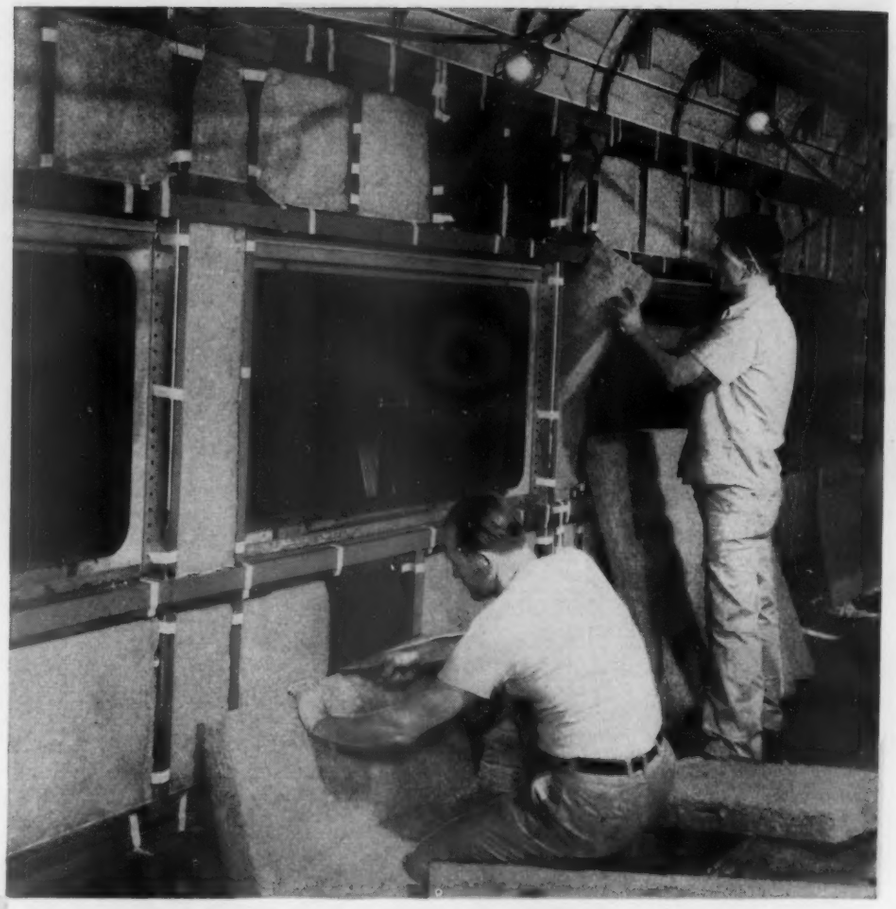
COMMONWEALTH Trucks used by the diesel locomotive builders of America have one-piece cast steel truck frames which provide great strength and dependability, assuring a long maintenance-free life in this rugged service.



Commonwealth 6-Wheel Motor Truck arranged for three motors

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. EDDYSTONE, PA.



Light,
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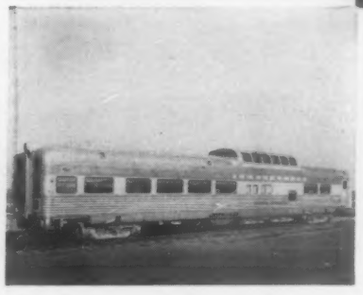

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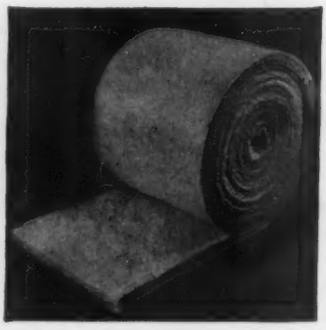
insulation

Contributing a great deal to the comfort of Burlington's new Kansas City and American Royal Zephyrs is Ultralite glass fiber insulation, selected by the Burlington and the Budd Company to stand guard against heat, cold and sound. Zephyr-light in weight . . . superior in thermal and acoustical properties . . . virtually indestructible . . . easily applied — these were the major reasons why Ultralite was a "natural" for these passenger cars of advanced design.

Budd since 1939 and Burlington since 1940 have used passenger car insulation from Gustin-Bacon. Gustin-Bacon takes pride in this long and pleasant association, and in its "material contribution" to the new Zephyrs that will provide travelers the safest, most pleasant, most comfortable journeys possible.

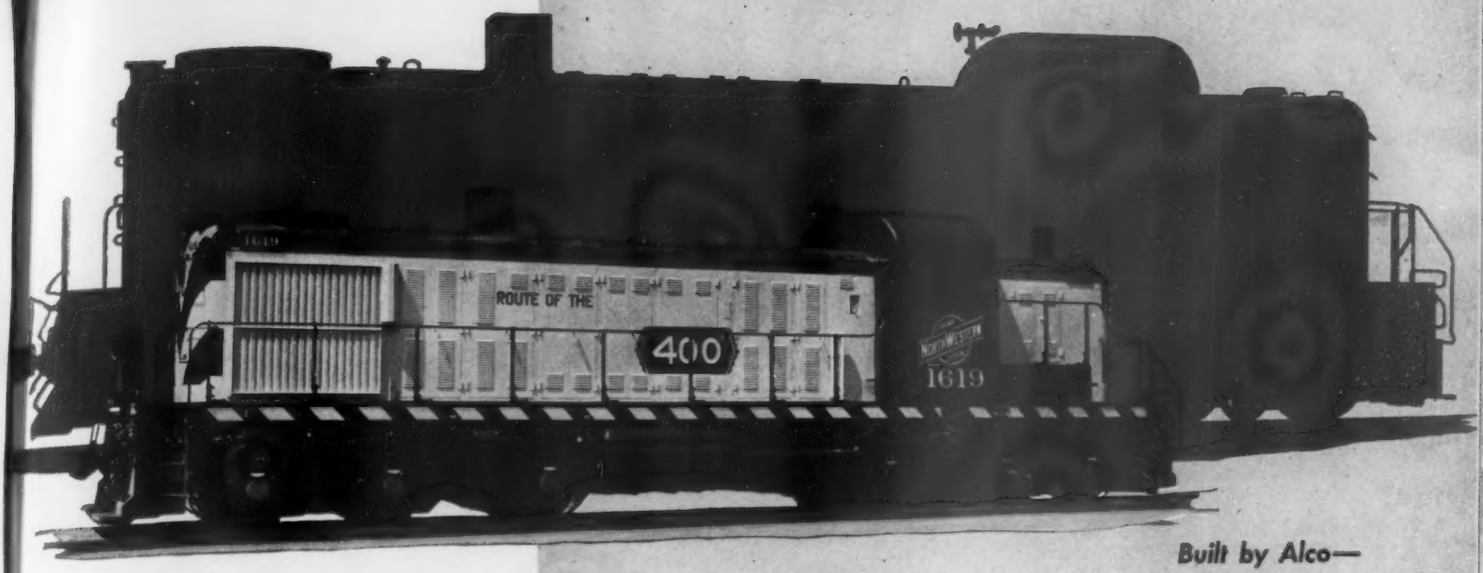


GUSTIN-BACON MANUFACTURING CO.

210 W. 10th St., Kansas City, Missouri

New York • Chicago • Philadelphia • San Francisco • Los Angeles • Houston
Tulsa • Fort Worth • Detroit • St. Louis

Keeping pace with the Nation's Railroads through research and development — since 1898



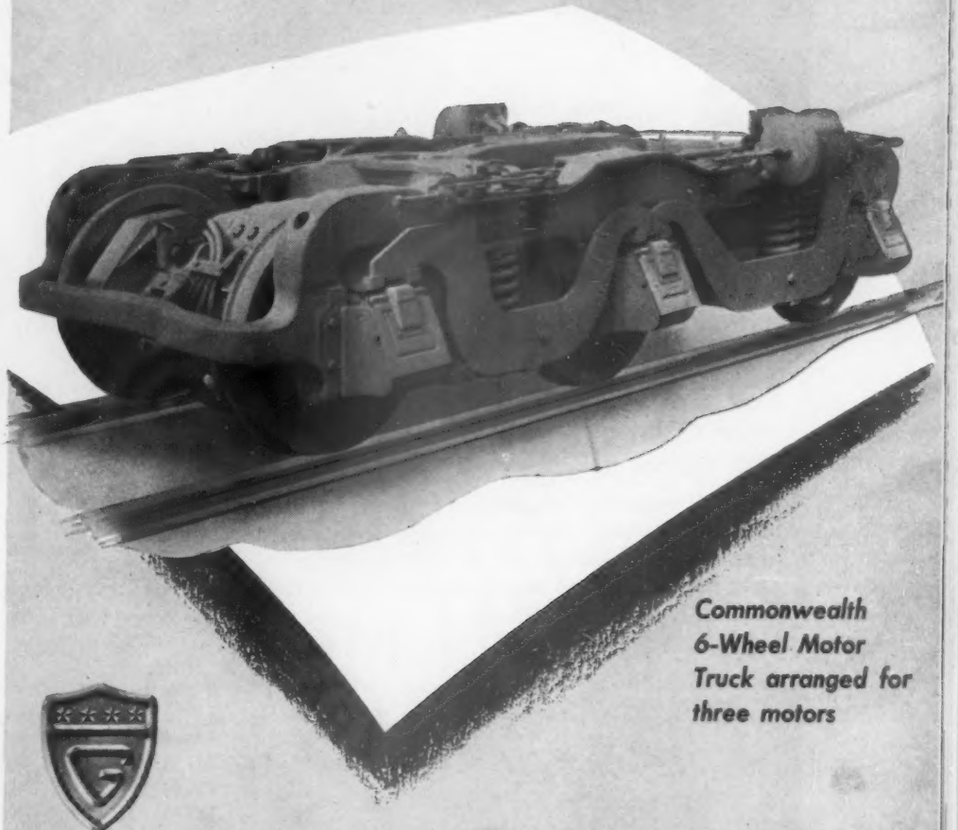
Built by Alco—
1600 h.p. road switcher

A New Development...

COMMONWEALTH 6-Wheel Motor Truck

Riding and performance of road switcher diesel locomotives is improved with a new design of COMMONWEALTH 6-WHEEL MOTOR TRUCK which features a three point suspension arrangement of center plate and loading supports, shorter wheel base and positive equalization. Additional advantages of this new truck permit a lower underframe height from rail, greater accessibility to motors, and lower bearing pressure on center plate and loading supports.

COMMONWEALTH Trucks used by the diesel locomotive builders of America have one-piece cast steel truck frames which provide great strength and dependability, assuring a long maintenance-free life in this rugged service.

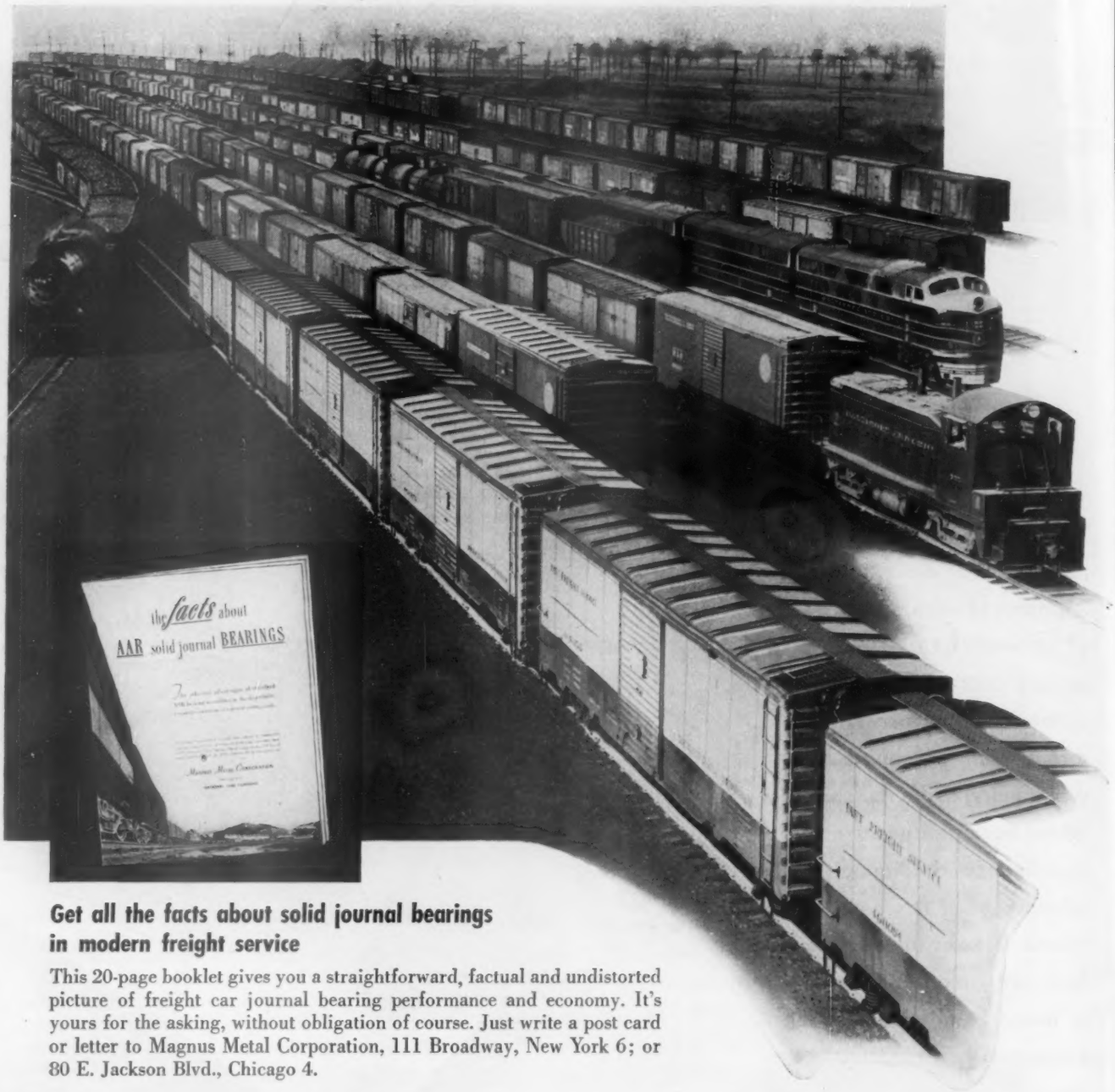


Commonwealth 6-Wheel Motor Truck arranged for three motors

GENERAL STEEL CASTINGS

GRANITE CITY, ILL. EDDYSTONE, PA.

Here's why railroads get MORE



Get all the facts about solid journal bearings in modern freight service

This 20-page booklet gives you a straightforward, factual and undistorted picture of freight car journal bearing performance and economy. It's yours for the asking, without obligation of course. Just write a post card or letter to Magnus Metal Corporation, 111 Broadway, New York 6; or 80 E. Jackson Blvd., Chicago 4.

Freight Car Bearing Performance on 5 Class I Railroads Jan. - June, 1952

ROAD	CAR MILES	CAR MILES PER HOT BOX
A	671,393,660	805,028
B	841,889,615	583,430
C	342,236,133	1,306,244
D	608,257,451	677,347
E	79,531,783	548,495
Total	2,543,308,642	710,025

Here are the records for five top railroads in bearing performance. These records can be equalled or bettered by other roads.

FREIGHT REVENUE

per car dollar invested

...with LOW-COST SOLID BEARINGS

You get up to 20% more cars for your money when they're solid bearing equipped. That's 20% more hauling capacity for the same initial investment—plus a proved daily efficiency of 99.97% even with cars averaging 20 years old!

A SOLID bearing freight car earns just as much as one with any other kind of bearings—and it costs up to 20% less, too! These are facts. They add up to just one thing—the biggest possible return for each freight car dollar you spend. And you need that big return because, *for reasons entirely apart from the type of journal bearing installed,* a freight car has to earn its way in less than three hours a day.

Now what about maintenance and operating expense? Well, here's a question you can answer in part for yourself. Just take a good look at the passenger equipment you operate. Chances are some portion of your passenger cars have other than solid-type journal bearings installed. And if you figure in all your costs—the extra tools and facilities, the skilled labor and time, and inventories required, you'll see that you're better off with solid bearing cars where maintenance costs are concerned.

Bearing Efficiency and Operating Expense

So it becomes a question of bearing efficiency and daily operating performance. Well, here the facts about solid bearings are known. Throughout the year there's less than one failure for each 4,000 cars per day—an efficiency index of better than 99.97%, even though the cars average over 20 years old. New solid bearing freight cars do even better—often go millions of car miles without a bearing failure.

How to Lick Hot Boxes

Of course, this doesn't mean that hot boxes are not still a problem. But you can lick this problem best with low-cost solid bearing designs. Heat-resistant lining metals and low-cost alarms are already available. Improved lubricating methods are being developed. Combine these improvements with *an intensified program to upgrade maintenance standards,* and hot boxes will virtually disappear.

Then, too, you'll still have all the other advantages which solid bearings bring to railroad rolling stock. You can take the maximum load, make the fastest schedule. You'll save an average of 1,000 pounds per car and get the smoothest (and quietest) ride on any standard truck. But best of all, you'll be sure of the best possible bearing performance at the lowest possible cost.

MAGNUS

Solid Bearings

Right for Railroads

...in performance...in cost

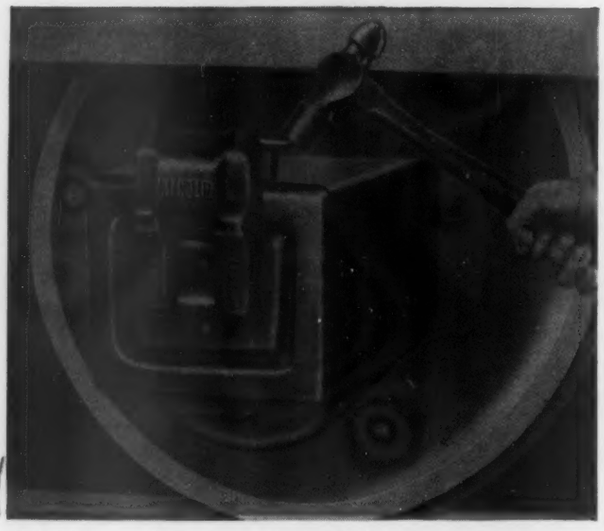
MAGNUS METAL CORPORATION *Subsidiary of* **NATIONAL LEAD COMPANY**

ALCOLID® installation...

SIMPLE AS

A Align holes in lid with holes in box and insert square-headed retaining pin.

B Push lid down to put spring under pressure and *withdraw shipping pin.*



C Close lid by pushing all the way down. Bend tab over head of retaining pin.

Installed in a matter of seconds, ALCOLIDS are specifically designed to overcome all the usual journal box lid troubles and to provide a lifetime of service.

Wear on the eyes of the hood is eliminated because the square-headed, locked retaining pin never rotates. This also prevents loss of lids and—coupled with the fact that a sturdy torsion spring seals the fully articulated cover tight—prevents lid vibration.

To put all these advantages to work for *you*, send for complete information to your ALCO sales representative in New York, Richmond, Cleveland, Chicago, St. Louis, St. Paul, San Francisco.

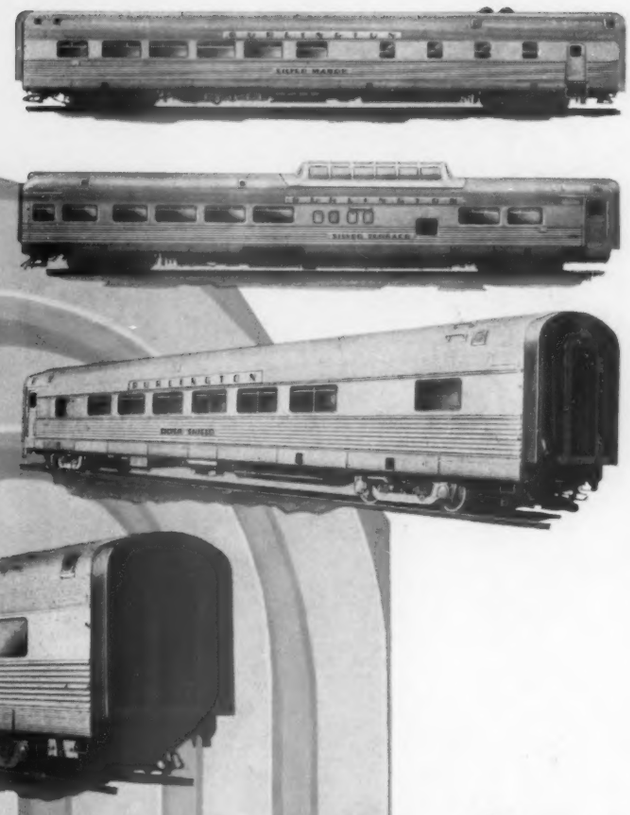
ALCOLID

PATENTED

RAILWAY STEEL-SPRING DIVISION

AMERICAN LOCOMOTIVE COMPANY

Burlington Route

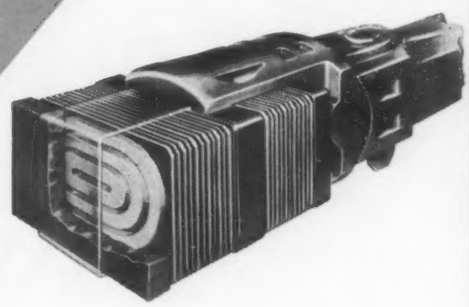


ON THE NEWEST AND FINEST *Always!*

These Budd-built cars for the new Kansas City Zephyrs and American Royal Zephyrs carry on the Burlington Tradition of THE FINEST FIRST.

The Burlington was one of the first railroads to adopt streamline passenger trains. Its first Zephyrs were the talk of America and every Budd-built Zephyr since has had some feature that was a first of its kind in railroading.

Naturally, Burlington was one of the first to adopt Waughmat Twin Cushions. Twin Cushions, assuring smooth restful riding without jerks, jolts or jars, are standard equipment on Burlington Zephyrs . . . as on most of the name trains of America.



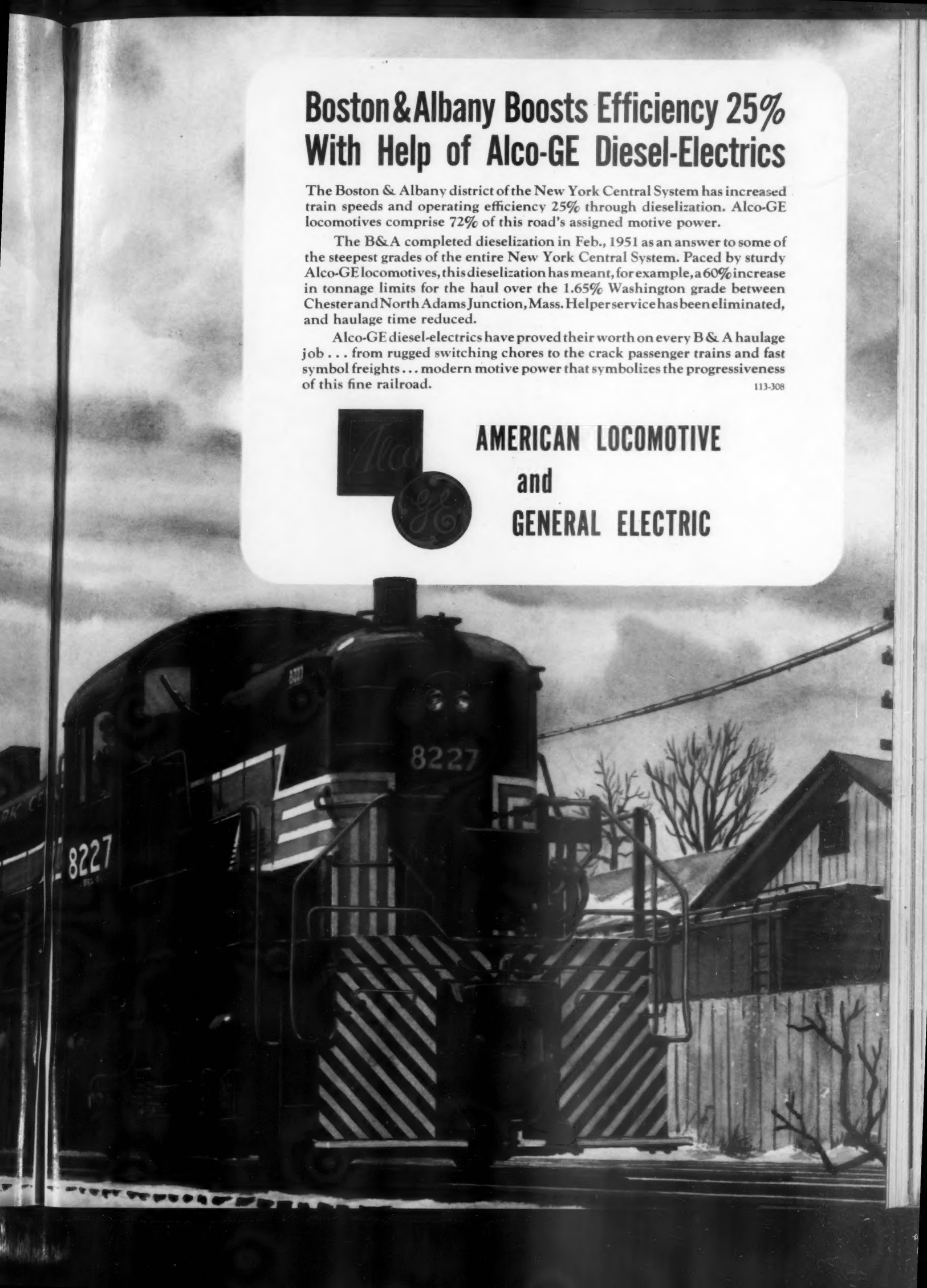
WAUGHMAT

Twin Cushions

TRADE MARK REGISTERED

WAUGH EQUIPMENT COMPANY, *NEW YORK, CHICAGO, ST. LOUIS* • CANADIAN WAUGH EQUIPMENT COMPANY, *MONTREAL*

NEW YORK CE



Boston & Albany Boosts Efficiency 25% With Help of Alco-GE Diesel-Electrics

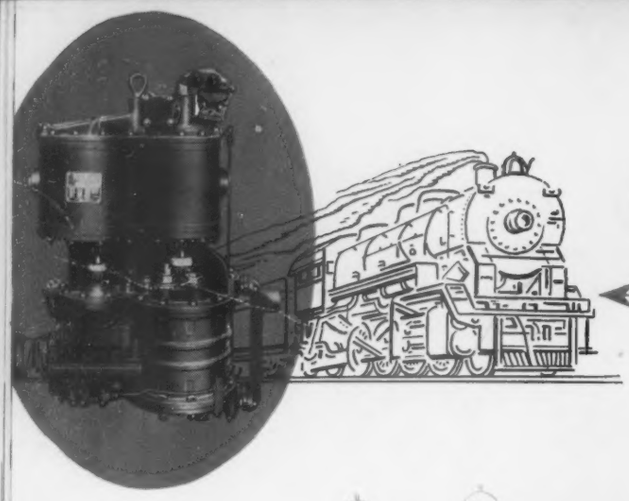
The Boston & Albany district of the New York Central System has increased train speeds and operating efficiency 25% through dieselization. Alco-GE locomotives comprise 72% of this road's assigned motive power.

The B&A completed dieselization in Feb., 1951 as an answer to some of the steepest grades of the entire New York Central System. Paced by sturdy Alco-GE locomotives, this dieselization has meant, for example, a 60% increase in tonnage limits for the haul over the 1.65% Washington grade between Chester and North Adams Junction, Mass. Helper service has been eliminated, and haulage time reduced.

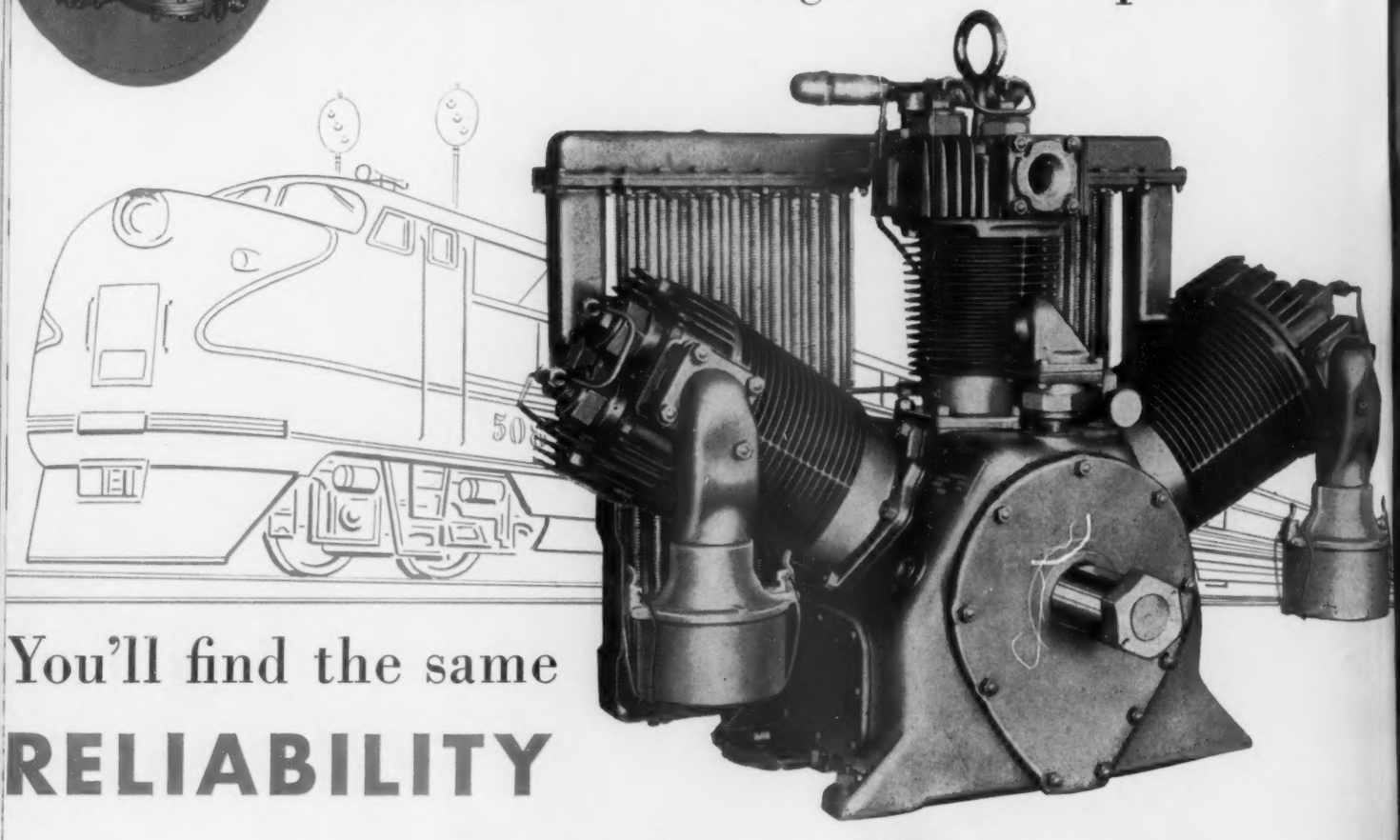
Alco-GE diesel-electrics have proved their worth on every B & A haulage job . . . from rugged switching chores to the crack passenger trains and fast symbol freights . . . modern motive power that symbolizes the progressiveness of this fine railroad.

113-308

AMERICAN LOCOMOTIVE
and
GENERAL ELECTRIC



You know the DEPENDABILITY OF THIS Westinghouse Compressor



You'll find the same RELIABILITY in the Westinghouse CD Compressor

When it comes to a reputation for dependability—it's hard to beat the one established by Westinghouse steam-driven air compressors. Tens of thousands are still chugging away on the sides of steam locomotives—and each is a guarantee of a positive, dependable air supply.

The same fine engineering that made this compressor such a completely reliable performer is behind the Westinghouse CD Compressor for Diesel service. Every feature that will contribute to dependability, efficiency, and trouble-free service has been included.

These include:

1) Radiator Type Intercooler between high pressure and low pressure cylinders. This reduces the temperature of the discharge air, and boosts efficiency.

2) Full pressure type lubrication system. A constant flow of filtered oil is maintained to connecting rod crankshaft bearings and wrist-pin bearings.

3) Cylinder wall and main crankshaft ball bearings are positively lubricated by a throw-off of oil from connecting rod bearings. Oil pressure relief valve "meters" the oil in accordance with compressor speed.

To give your new Diesel units a completely reliable air supply . . . use Westinghouse CD Compressors.

Westinghouse Air Brake Co.

AIR BRAKE DIVISION

WILMERDING, PA.

Brakes are Basic to Railroad Progress

PROGRESS
RIDES THE
ZEPHYRS
9945A
urlington
Route
ELECTRO-MOTIVE DIVISION
GENERAL MOTORS
GENERAL MOTORS
LOCOMOTIVES

FOR 1953 ...

Ribbonrail
SERVICE MARK

out with the OLD in with the NEW!

Last year, railroads put in over 150 miles of continuous rail constructed with OXWELD'S RIBBONRAIL Service. Indications are that a number of railroads will select RIBBONRAIL Service for modern track construction in 1953.

The term "Ribbonrail" is a service mark of Union Carbide and Carbon Corporation.

OXWELD RAILROAD SERVICE COMPANY
A Division of Union Carbide and Carbon Corporation

UCC

Carbide and Carbon Building Chicago and New York
In Canada:
Canadian Railroad Service Company, Limited, Toronto

RIGHT DIET FOR DIESELS...

Gargoyle Diesel lubricating oils contain all four properties essential for efficient engine operation!

Yes, Gargoyle Diesel lubricating oils are "just what the doctor ordered" for today's high-speed engines!

We cooperated closely with operators and builders to develop these oils—made exhaustive field evaluations and laboratory tests. Today—on every major road—these oils are *proving* their ability to keep Diesels running at top efficiency!

Let our products, experience and research facilities help improve *your* operations. Just give us a call.

Railroad Lubricants

SOCONY-VACUUM

Correct Lubrication

WORLD'S GREATEST LUBRICATION KNOWLEDGE AND ENGINEERING SERVICE

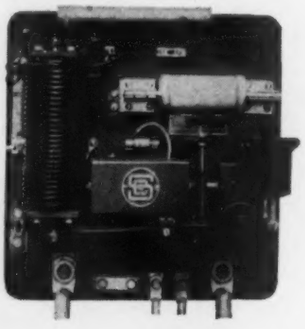
SOCONY-VACUUM OIL COMPANY, INC., Railroad Division, 26 Broadway, New York 4, N. Y.

For Quality and Dependability... be sure it's "SAFETY" EQUIPMENT...

"Safety" GN-25825 Genemotor

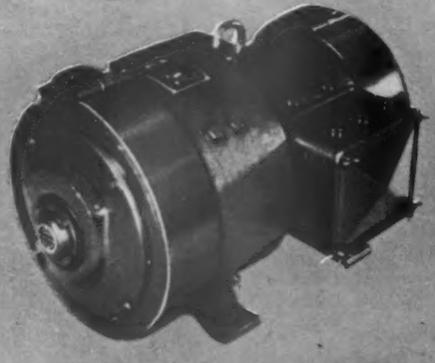
"Safety" Genemotors . . . 25kw and 30kw . . . to provide high capacity output en route and dependable standby power at terminals.

Dependable "Safety" equipment applications have been a part of the C. B. and Q. Railroad for over fifty years . . . we are proud of the past record of this equipment and also of the opportunity to supply "Safety" equipment for the new Budd-built "Kansas City Zephyrs" and "American Royal Zephyrs."



"Safety" SM-150-EAB Generator Regulator

"Safety" Control Equipment . . . *generator regulators* . . . automatic voltage and current control • *load regulators* . . . constant line voltage regulation • *reverse current relays* . . . automatically connect and disconnect the generator from the battery and load.



"Safety" 2kw Motor Alternator

"Safety" Motor Alternators . . . 2kw capacity . . . inherently regulated conversion units . . . to provide AC power for fluorescent lighting, water coolers and other alternating current loads.

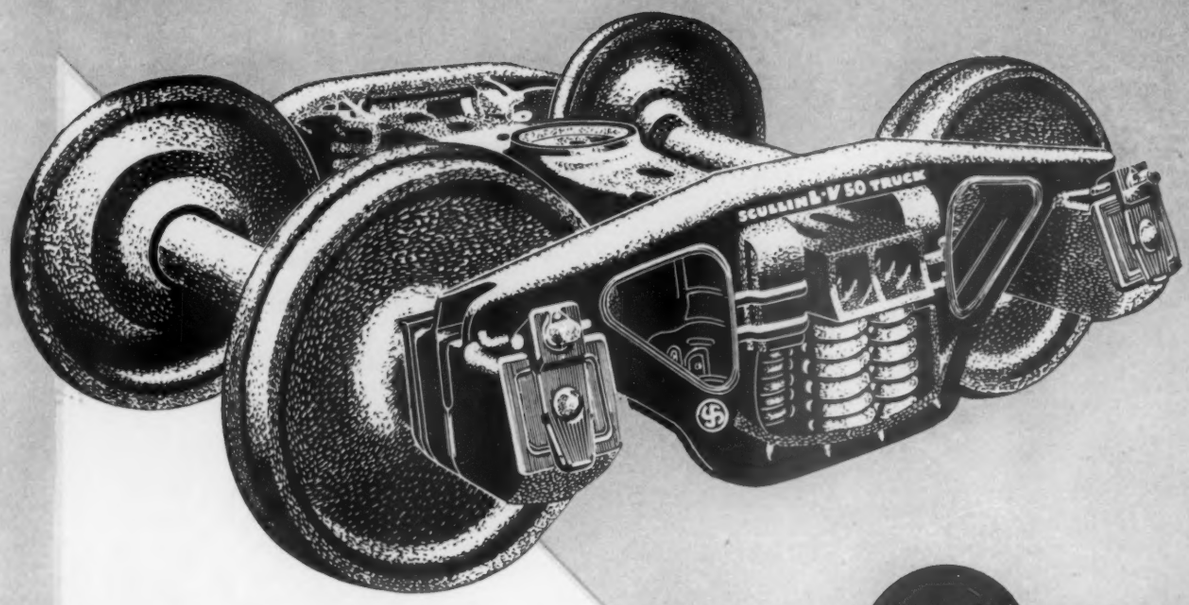
"Safety" lighting fixture installation in "Kansas City Zephyr" lounge car

"Safety" Lighting Fixtures . . . optically correct and attractively designed for sleeping cars, coaches and other locations in the "Kansas City Zephyrs" and "American Royal Zephyrs."

THE SAFETY CAR HEATING AND LIGHTING COMPANY INC.

NEW YORK · CHICAGO · PHILADELPHIA · ST. LOUIS · SAN FRANCISCO · NEW HAVEN · MONTREAL

SAFETY COMPANY PRODUCTS INCLUDE: Air-conditioning Equipment • Genemotors • Generators • Fans • Regulators • Blower Units Lighting Fixtures • Switchboards • Luggage Racks • Motor Alternators • Dynamotors • Motor Generators • Dual Voltage MG Sets



SCULLIN L 50 V TRUCKS

LATERAL VERTICAL
CUSHIONED MOTION

THE SMOOTHEST TRAFFIC-BUILDERS
BETWEEN LCL AND YOUR RAILS

Photo Courtesy
Southern Railway System

STEEL CASTINGS MANUFACTURER

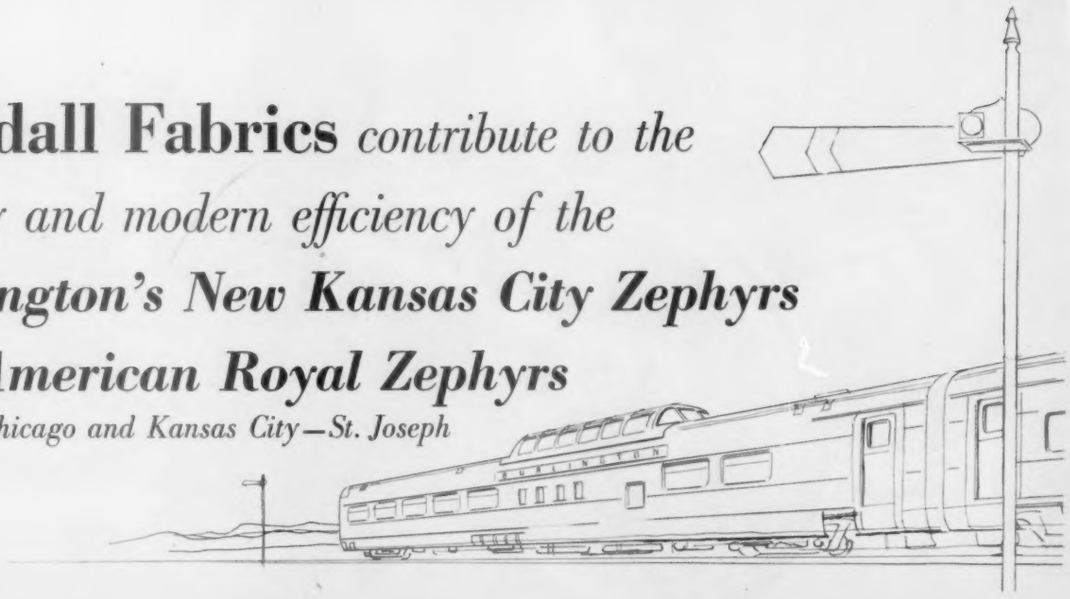
SCULLIN STEEL CO.

SAINT LOUIS 10, MISSOURI

NEW YORK
CHICAGO
BALTIMORE
RICHMOND, VA.

Goodall Fabrics *contribute to the luxury and modern efficiency of the* ***Burlington's New Kansas City Zephyrs*** *and* ***American Royal Zephyrs***

between Chicago and Kansas City—St. Joseph



Interior of one of The Burlington's new cars built by Budd

The upholstery and drapery fabrics in the Kansas City and American Royal Zephyrs are 100% Goodall! *Blended-to-Perform* Goodall Fabrics offer the highest quality, luxury, and utility value to give the transportation industry maximum service, economical maintenance, and lasting beauty.

Where luxury and durability are the keynote...

GOODALL FABRICS

are preferred

Goodall-fabrics

Subsidiary of Goodall-Sanford, Inc.

THE FINEST NAME IN FABRICS

*Reg. T. M.

© 1953, Goodall Fabrics, Inc., Subsidiary, Goodall-Sanford, Inc.

GOODALL FABRICS, INC. (Sole Makers of World-Famous PALM BEACH* Cloth)

NEW YORK • BOSTON • CHICAGO • DETROIT • SAN FRANCISCO • LOS ANGELES

WHAT CAUSED THIS

ROUGH CAR HANDLING?

CORROSION?

yes, BUT . . . there are *three* reasons for the increasing number of cars you see in this condition on sidings and rip tracks. The *third* cause is inadequate design—*outdated construction!*

International

THERE'S A NEW PRECISION IN FREIGHT CAR CONSTRUCTION

Shippers *must* be served! Cars *must* go through classification yards speedily and be able to stand high speeds on the line! You can't hold back today's progress to match yesterday's construction techniques—look to *International* for the new precision that makes *today's* cars for *today's* pace!

International's CORRECTIVE DESIGN

Heavier end side panel of 3/16" plate replaces conventional .10" sheet. Shorter span plate incorporates "W" section corner post as well as the first intermediate post—provides substantial anchoring of the end. All-welded at all points to eliminate moisture entry points and infestation harbors!

INTERNATIONAL STEEL COMPANY RAILWAY DIVISION

EVANSVILLE 7, INDIANA

When "Name Trains" are conceived, the designers, builders and prospective operators consider every phase of construction, base materials, adaptability to use, safety, economy and long wear under the most rugged conditions.

You can be certain that their decisions and selections will be worthy of the prestige they expect their finished product to maintain.

IN THE NEW

Kansas City Zephyrs

BUILT BY THE BUDD COMPANY

For the CHICAGO, BURLINGTON & QUINCY RAILROAD

The "CANTON" trade mark can be found on many vital parts including EQUALIZERS — CROSS BARS — ADAPTERS — GEARS — SUPPORTS — CENTER PLATES — HANGERS — CONNECTING RODS — RETAINERS — FRAME MEMBERS and many others where hard wear and friction demand maximum durability.

CANTON

DROP FORGING & MFG. CO.

CANTON, OHIO

DROP FORGINGS FOR PARTICULAR USERS SINCE 1903

RIGID-tex METALS

● look at that wainscoting! more scratches, dents, doodlings and scrapes in it than a zoo-full of long-clawed tigers could put there. more revenue-making time lost in the repair shop. and yet it doesn't have to be that way. railroads, bus transit companies and automotive manufacturers are installing Rigid-tex Metals on wainscoting, footrests, scuff plates and other hard-wear areas for reduced maintenance costs of up to 60%. the clear-through pattern conceals damage and stays as new-looking as the day it was first installed. run your fingers over this imagination-metal and see for yourself. see how you, too, can cut on profit-eating maintenance costs . . . write for detailed folders . . . on your company letterheads, please.

RIGIDIZED METALS CORPORATION

7292 Ohio Street Buffalo 3, N.Y.

U.S. and Foreign Patents

50 Warehouses and Sales Representatives in All Principal Cities Throughout the U.S. and Canada

newest *Budd* streamliners ride safely on . . .

YOUNGSTOWN STEEL CAR WELDMENTS

YOCAR

Just as Budd has developed the art of designing and building modern up-to-the-minute streamlined trains, so has **Yocar** developed the technique of fabricating and welding modern up-to-the-minute high strength steels. Budd and **Yocar** combine their skills in the two new Kansas City Zephyrs and the two new American Royal Zephyrs for the Burlington. **Yocar** end underframe weldments assure a safe foundation for these luxury speedsters by Budd.

Consult **Yocar** for your weldment requirements.

YOUNGSTOWN STEEL CAR CORPORATION

NILES 6, OHIO

YOCAR

RUST-OLEUM

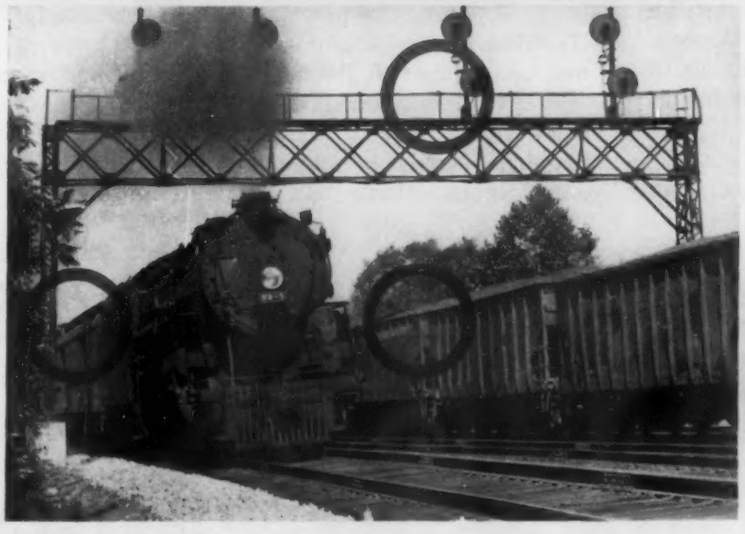
STOPS RUST!

Cut Your Maintenance Costs On Signalling Equipment, Rolling Stock, Bridges, Towers, Tanks, etc.

Here's the *practical, sensible* answer to your rust problems! Costly sandblasting or chemical precleaning are not usually required . . . just wirebrush and scrape to remove rust scale and loose particles . . . then apply RUST-OLEUM by brush, dip, or spray over the rusted surface. Dries to a tough, elastic, rust-resisting film that lasts longer applied over rusted areas. So easy to use that one man often does the work of two . . . saves you time, labor, and money. Get the complete story from your RUST-OLEUM Rust Preventive Railroad Specialist today!

RUST-OLEUM CORPORATION
2595 Oakton Street, Evanston, Illinois

Available In All Colors, Aluminum and White



Request Your FREE Copy of The RUST-OLEUM Railroad Catalog Now!

We can learn from bankrupt Micawber

"MY advice, Copperfield, you know. Annual income twenty pounds, annual expenditure nineteen-nineteen-six, result happiness. Annual income twenty pounds, annual expenditure twenty-ought-six, result misery. The blossom is blighted, the leaf is withered—in short you are forever floored. As I am!"

This is probably the most famous financial counsel in all English literature, offered a hundred years ago by Charles Dickens' character the bankrupt Micawber to the hero David Copperfield. As advice it is just as good in 1953 as it was in 1849, and just as sound for a nation as for an individual.

In 17 of the last 20 years, Uncle Sam has followed Micawber's practice, not his advice. Our national balance sheet has been, figuratively, "annual income twenty pounds, annual expenditure twenty-ought-six". Ahead of us as a nation, if we continue this irresponsible policy, is Micawber's dire predicament, "blossom blighted, leaf withered—forever floored".

There is no sane reason why the world's richest nation should continue to live the financial life of a profligate bankrupt. It is time now to set our house in order. The program called for is simple: (1) Eliminate waste and extravagance in government spending; (2) Balance the Federal budget; (3) Control the national debt and reduce taxes.

By such positive action we can protect future happiness—and prevent misery—for ourselves, our children and our children's children.

QUALITY
YOUNGSTOWN
SERVICE

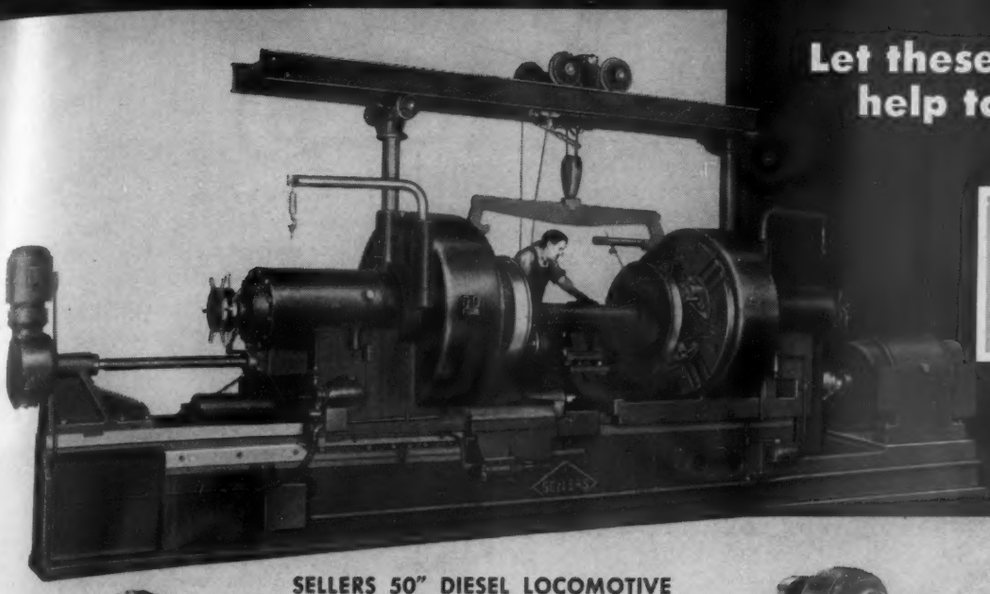
The Youngstown Sheet and Tube Company

General Offices--Youngstown 1, Ohio
Export Offices--500 Fifth Avenue, New York
MANUFACTURERS OF CARBON ALLOY AND YOLOY STEELS

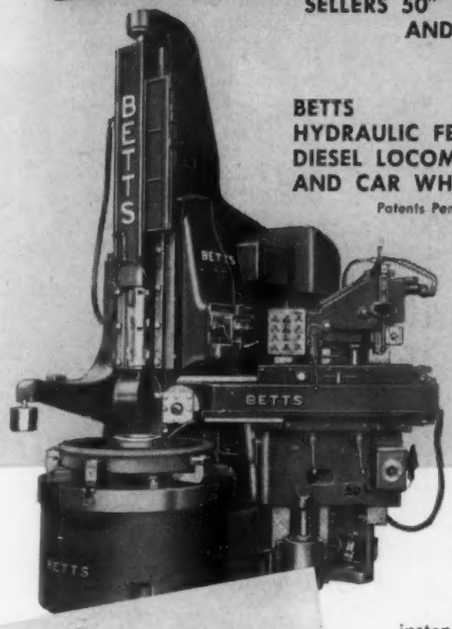
RAILROAD TRACK SPIKES - CONDUIT - HOT AND COLD FINISHED CARBON AND ALLOY BARS - PIPE AND TUBULAR PRODUCTS - WIRE - ELECTROLYTIC TIN PLATE - COKE TIN PLATE - RODS - SHEETS - PLATES.

Let these modern machines help to reduce your costs

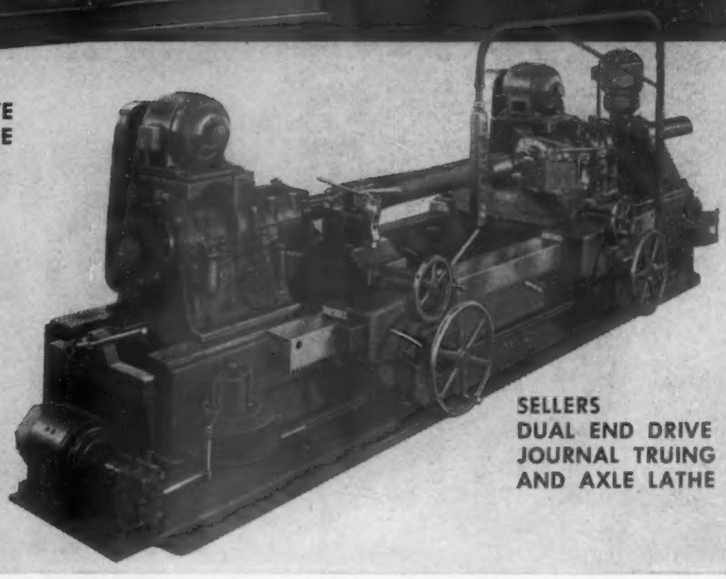
Faster, more economical production for all your diesel locomotive and car wheel and axle work



SELLERS 50" DIESEL LOCOMOTIVE AND CAR WHEEL LATHE



BETTS HYDRAULIC FEED DIESEL LOCOMOTIVE AND CAR WHEEL BORER
Patents Pending



SELLERS DUAL END DRIVE JOURNAL TRUING AND AXLE LATHE

Among Railroad Tools built by Consolidated are . . .

CAR WHEEL BORERS
DIESEL WHEEL BORERS
BURNISHING LATHES
TIRE MILLS
END DRIVE AXLE LATHES
CENTER DRIVE AXLE LATHES
JOURNAL TRUING LATHES
DRIVING WHEEL LATHES
CAR WHEEL LATHES
RADIUS LINK GRINDERS
PROFILE MILLING MACHINES
SLAB MILLING MACHINES
ROD MILLING MACHINES
CYLINDER BORING MACHINES
KEYWAY MILLING MACHINES
CRANK PLANERS
DRILL PRESSES
AND OTHERS

SELLERS 50" DIESEL LOCOMOTIVE AND CAR WHEEL LATHE turns diesel locomotive and car wheels from 28" to 50" tread diameter. Designed with speed range suitable for either carbide or high speed steel tools. Two mechanical speed changes in conjunction with a variable speed 75 H.P. motor provide speed ranges of approximately .9 to 3.6 R.P.M. and 5 to 20 R.P.M. of faceplate with instantaneous speed selection. Faceplates are recessed, with removable filler blocks, for turning diesel wheels, motor coach wheels and trailer wheels with roller bearings. As illustrated, this machine is arranged with four self-equalizing hydraulic drivers on each faceplate, insuring equalized pressure on the wheel rims.

BETTS HYDRAULIC FEED DIESEL LOCOMOTIVE AND CAR WHEEL BORER takes diesel locomotive wheels up to 48" tread diameter, passenger and freight car wheels down to 30" tread diameter. Hydraulically operated side head, for turning and facing hubs, has feed and rapid traverse vertically and horizontally with supplementary hand feed. Full automatic boring cycle from loaded start to stop supplemented by manual operation at any point in the automatic cycle. Speed range suitable for either carbide or high speed steel tools.

SELLERS DUAL END DRIVE JOURNAL TRUING AND AXLE LATHE for both new and reconditioning work, this machine turns and burnishes rough turned AAR car axles in sizes from 4¼" x 8" up to and including 6½" x 12", and turns and burnishes journals and collars on mounted car wheel sets up to and including 38" tread diameter. It is also available with greater swing for larger wheels. Designed with speed range suitable for carbide tools.

Full details covering any or all of these modern Consolidated machines will be furnished upon request. Let us show you how their labor-saving features not only can help to reduce your costs but also, by largely eliminating manual operations, encourage the operator to make full use of the higher production capacities of which these machines are capable.

BUILDERS OF HEAVY DUTY MACHINE TOOLS SINCE 1848

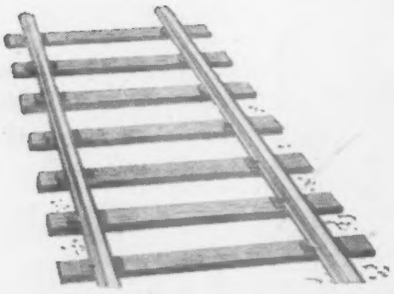
BETTS • BETTS-BRIDGEFORD • COLBURN • HILLES & JONES • MODERN • NEWTON • SELLERS

CONSOLIDATED MACHINE TOOLS

CONSOLIDATED
MACHINE TOOL CORPORATION

SUBSIDIARY OF FARREL-BIRMINGHAM COMPANY, INCORPORATED

ROCHESTER, NEW YORK



Now! Exclusively for Railroads!

GENERAL CHEMICAL'S

Rite-o-way* BRAND

TCA-CHLORATE

and other

Weed Control Chemicals

NO ONE CHEMICAL can be a "cure-all" for the widely varying weed problems encountered by railroads from coast to coast. That's why General Chemical has developed its *Rite-o-way Brand* of weed killer formulations especially for railroad use.

THIS GROUP OF weed control chemicals is the outgrowth of General Chemical's long experience and extensive background in handling individual railroad weed control problems. One of General Chemical's most recent developments is Rite-o-way TCA—CHLORATE. This product contains a special high-strength formulation of sodium trichloroacetate and sodium chlorate—a combination that is now widely recognized as the outstanding all-purpose weed control material.

LET US TELL YOU MORE about General's Rite-o-way Brand weed killers . . . and how General Chemical's proven weed control program has achieved outstanding results for leading roads. A confidential conference with a General Chemical weed control specialist will show you how to take full advantage of General's "customized" weed control program for 1953. For further information, write to the address below.

*General Chemical trade-mark

Weed Killer Department

GENERAL CHEMICAL DIVISION

ALLIED CHEMICAL & DYE CORPORATION

40 Rector Street, New York 6, N. Y.

Following are General Chemical's Rite-o-way Brand Weed Killers. One or more of these can provide the right combination to give outstanding weed control results for your road. Investigate today!

TCA-CHLORATE
Special High Strength Formulation

Contains a special high-strength formulation of sodium trichloroacetate and sodium chlorate, now widely recognized as the outstanding all-purpose weed control material. Provides maximum root control for perennial weeds and grasses. Most effective when applied in post-frost and pre-frost months (early spring and late fall). Mid-summer treatments may be used for control of annual growth and perennial seedlings.

FORMULA 7
(TCA, Acid in an Oil Base)

For general purpose grass control. Used with diluting oil and one of the additives listed for over-all control of weeds.

FORMULA 7
(with 2,4-D)

Combines maximum contact "knock-down" of heavy foliage and residual control of root crowns, providing long-lasting suppression of regrowth. Used with diluting oil where grasses predominate, but includes sufficient 2,4-D to control moderate infestations of broad-leafed weeds.

FORMULA 7 B-D

Used with diluting oil for control of very resistant weeds and grasses. The amount of 2,4-D has been increased and fortified by pentachlorophenol.

SODIUM TCA
(Liquid Concentrate)

For control of noxious grasses. For all-purpose weed control when used with sodium chlorate or one of the 2,4-D additives listed.

EMULSIBLE AROMATIC OIL

Low cost contact weed control for temporary clearance of seedling growth and as interim treatment between seasonal applications for perennial root control.

2,4-D AMINE ADDITIVE

Used simultaneously with Formula 7 or mixed with Sodium TCA for all-purpose weed and grass control.

2,4-D ESTER ADDITIVE

For use with Formula 7 where cotton or other plants susceptible to 2,4-D are not adjacent to treated area.

2,4-D—2,4,5-T ESTER
Brush Killer (Water Soluble)

YOURS—Built-In
MAXIMUM SAFETY
ON THE BURLINGTON'S
NEW Kansas City ZEPHYR
(Built by THE BUDD COMPANY, Philadelphia)

Interior of ZEPHYR Parlor-Dome Observation Car.

and—**MAXIMUM SAFETY Everywhere with**

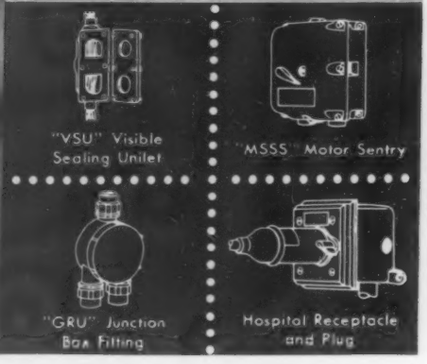
APPLETON COUPLINGS
For Use with THIN-WALL Electric Tubing

- Grip like a vise
- Speedy in fitting
- Concrete-tight
- U-L approved
- Rain-tight

Sold Through Electrical Wholesalers Everywhere

APPLETON ELECTRIC COMPANY
1727 WELLINGTON AVENUE • CHICAGO 13, ILLINOIS

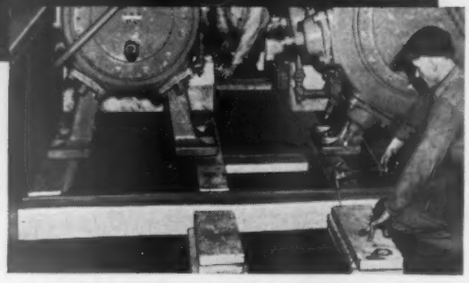
There Are APPLETON Explosion-Proof Fittings for Every Requirement



NEW MATERIALS HANDLING METHODS MAKE

N-S-F the Ideal Car Flooring

ONLY NAILABLE STEEL FLOORING WITHSTANDS ALL WAYS OF LOADING —AND CARRIES EVERY KIND OF LOAD



53-SF-1

N-S-F for NAILABLE STEEL FLOORING

PATENTS PENDING

NAILABLE STEEL FLOORING takes the concentrated weight of lift trucks . . . the impact of magnet and clamshell loading . . . with a minimum of maintenance. Because of its channel form, N-S-F, when welded to the car structure, also reduces stresses of impact shocks on the underframes.

Yet remember: N-S-F carries *blocked* and *skidded* loads, too! It holds them with maximum security, and its nail-holding efficiency is *not* reduced by repeated nailing operations. NAILABLE STEEL FLOORING makes every gondola a double-duty car—capable of handling rough freight as well as finished freight requiring blocking.

N-S-F, made from tough N-A-X HIGH-TENSILE steel, is the way to equip *all* cars—gondolas and boxcars—to meet modern materials handling methods.

N-S-F

- √ MEETS MODERN CONDITIONS
- √ ADDS STRUCTURAL STRENGTH
- √ WILL NOT DETERIORATE
- √ DOUBLES CAR AVAILABILITY
- √ INCREASES SHIPPING SAFETY
- √ REDUCES MAINTENANCE
- √ MEANS LOWEST OVER-ALL COST

Sales Representatives in Chicago, Philadelphia, St. Louis, Atlanta, Omaha, Denver, San Francisco, Montreal and New York

GREAT LAKES STEEL CORPORATION
STEEL FLOOR DIVISION • Ecorse, Detroit 29, Michigan

PRODUCER OF N-A-X HIGH-TENSILE STEEL

NATIONAL STEEL CORPORATION

DA-LITE CONTROL BLINDS *for Passenger Pleasure*

on the beautiful new **BURLINGTON ZEPHYRS**

SEPARATELY CONTROLLED FOR INDIVIDUAL COMFORT

The Burlington is a comfort-conscious road . . . that's why the new Budd-built Zephyrs — the beautiful *Kansas City* and the luxurious *American Royal* — are equipped with Da-lite Control venetian blinds. In soft pastel colors, these Da-lite Control blinds are as attractive in a closed position as they are open. They open *easily* — for full vision — and operate for *individual* control of brightness.

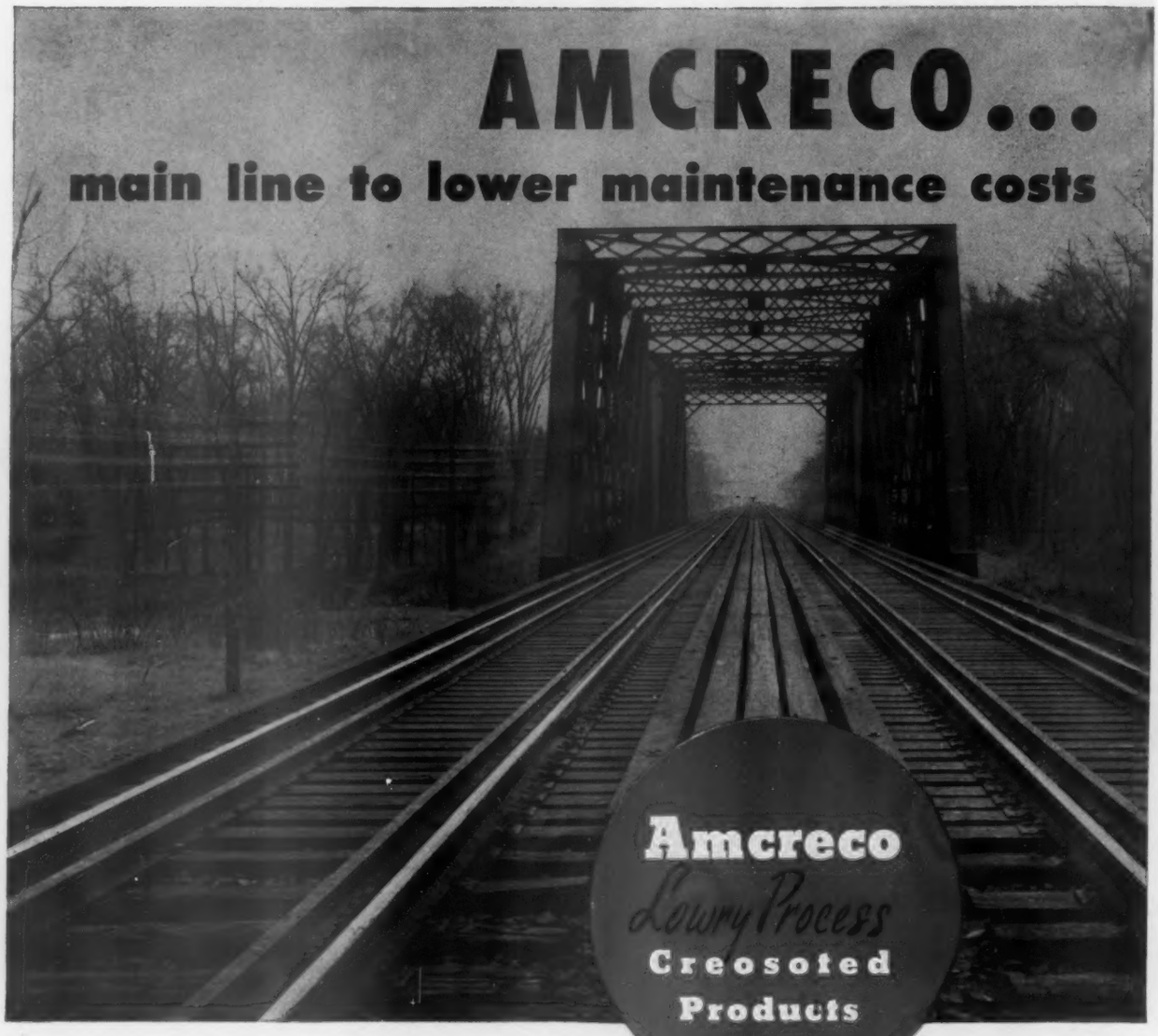
AJAX-CONSOLIDATED COMPANY

ANT AND GENERAL OFFICES: CHICAGO 50, ILLINOIS • SALES OFFICE: 64 E. JACKSON BLVD., CHICAGO 4, ILLINOIS

REPRESENTATIVES IN PRINCIPAL CITIES

AMCRECO...

main line to lower maintenance costs



Pressure treated for *Strength that Lasts*

Adzed and
Bored Cross Ties
Bridge Ties
Piles
Timbers

Just as railroad service has improved through the years—so has the quality of AMCRECO cross ties, bridge ties, piles and timbers. Through continuing research in the last quarter of a century, the service life of Amcreco creosoted products has been greatly extended. Improvements in our basic Lowry process of Creosoting under Pressure have given a green light to construction and maintenance economy. Write for a full explanation.

AMERICAN CREOSOTING COMPANY

COLONIAL CREOSOTING COMPANY INCORPORATED

AMCRECO LOWRY PROCESS CREOSOTED LUMBER

GEORGIA CREOSOTING COMPANY INCORPORATED

GENERAL SALES OFFICE—CHICAGO, ILLINOIS
10 FIELD SALES OFFICES TO SERVE YOU

Yes, Adlake "Breather" Windows are used throughout, in the new Budd-built Burlington Dome Cars

Adlake 96th year of serving the transportation and building industries

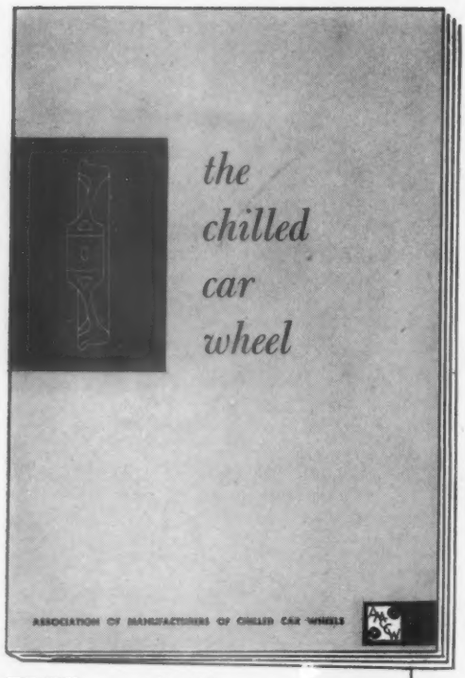
THE

Adams & Westlake

COMPANY

Established 1857 • ELKHART, INDIANA • New York • Chicago

Manufacturers of ADLAKE Specialties and Equipment for the Railway Industry



FREE—new booklet

What is chilled iron? How is it made?

Why is the chilled car wheel the most popular for freight car service?

How can a wheel be hard as steel yet easy to machine?

What is tellurium used for in car wheel manufacture?

Why do chilled car wheels reduce vibration?

What does "tape size" mean?

What type of wheel has the best overall safety record in freight car service?

These and dozens more questions about wheels for freight car service are answered in this 64-page booklet recently published by the AMCCW for distribution to those responsible for the purchase, inspection, mounting and maintenance of freight car wheels, and for apprentices who want this background information.

facts about today's chilled car wheel

summarized for convenient reference

This is the story of the wheel that carries two-thirds of the nation's freight cars...the chilled car wheel as it is made today in AMCCW plants —vastly improved over earlier designs, and with a safety performance that is second to none in this tough freight car service. This booklet packs a good deal of useful reference information into its 64 pages.

Main sections are devoted to chilled car wheel characteristics and properties, manufacturing operations, and inspection practices.

Also included are the main A.A.R. specifications for chilled car wheels, and other rules and practices from the A.A.R. Wheel and Axle Manual, Section XX.

ASSOCIATION OF MANUFACTURERS OF CHILLED CAR WHEELS
445 North Sacramento Boulevard, Chicago 12, Ill.

In good supply · Available locally · Short-haul delivery · Reduced inventory
Low first cost · Low exchange cost · Increased ton mileage · High safety standards
AMCCW plant inspection · Easier shop handling

Albany Car Wheel Co.
American Car & Foundry Co.
Griffin Wheel Co.
Marshall Car Wheel & Foundry Co.
Pullman-Standard Car Mfg. Co.
Southern Wheel (American Brake Shoe Co.)

Association of Manufacturers of Chilled Car Wheels
445 North Sacramento Boulevard, Chicago 12, Ill.

Please send me a FREE copy of your new booklet: The Chilled Car Wheel.

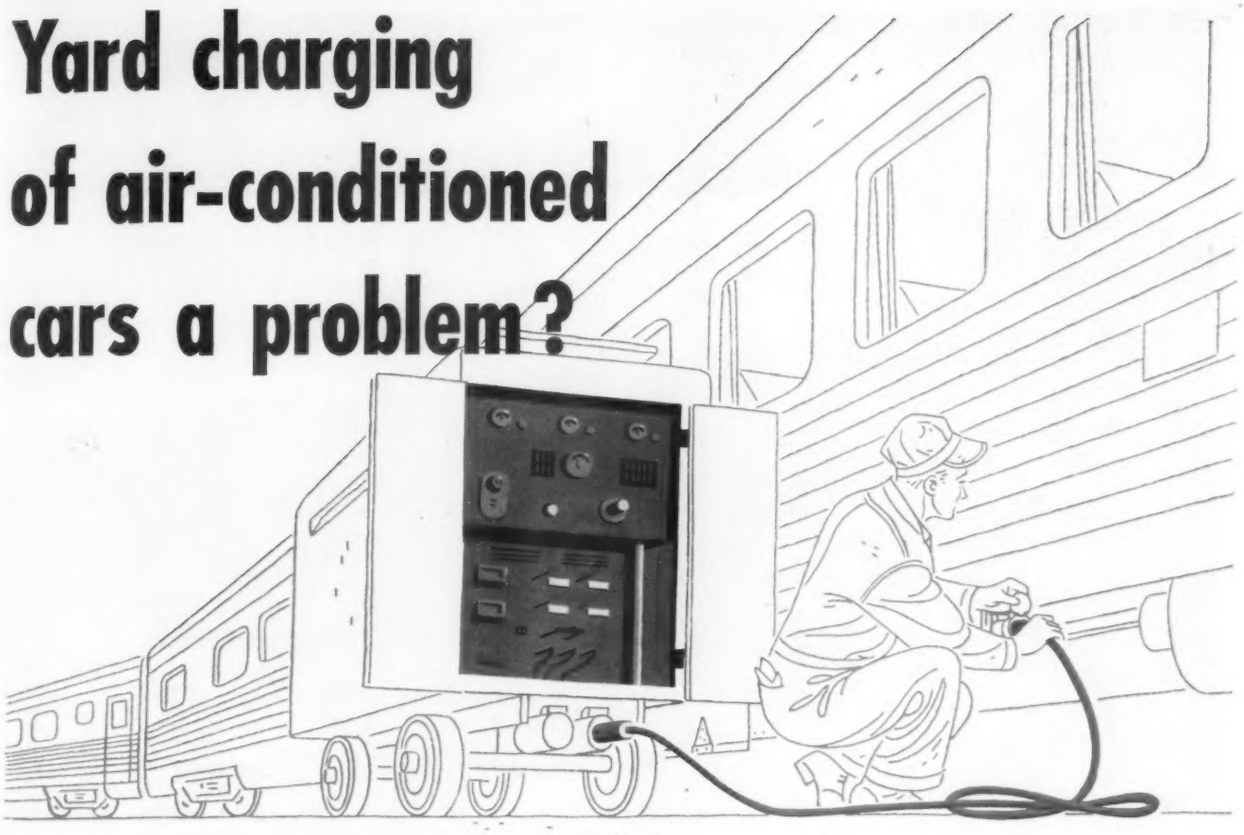
name_____

title_____

company_____

address_____

Yard charging of air-conditioned cars a problem?



try an EDISON

Superior road performance—EDISON batteries have no prescribed discharge limits . . . accept generator output without *finish-rate limitations* . . . can safely be maintained in a high state of charge on the road . . . seldom require yard charging.

Less weight—An EDISON has the strongest construction known, for each cell is made of steel . . . inside and out. As a result, it withstands even the shocks incidental to freight-train service. Another big plus is its light weight which frequently saves as much as 2000 pounds per car.

Extra long life—In length of life, too, an EDISON is unusual. For instance, one of the first railroads to adopt air-conditioning obtained 15 years of service on cars with electromechanical air-conditioning. Then switched these same EDISON batteries to head-end cars where they were recently reported still in operation.

Figure it any way you want . . . on freedom from trouble . . . superior road performance . . . less yard charging . . . less weight to haul . . . longer life, you just can't beat an EDISON. It's the most dependable battery you can buy . . . in addition, gives the lowest over-all cost. For more complete information, see your Edison field engineer—ask for Bulletin S.B. 3802. Edison Storage Battery Division of Thomas A. Edison, Incorporated, West Orange, N.J.

Most Dependable Power—
Lowest Over-all Cost
...you get <u>both</u> with an EDISON

EDISON
Nickel · Iron · Alkaline
STORAGE BATTERIES

Lumber Moves Faster

via the M. & St. L. and its Peoria Gateway

From the far-flung forests of the Pacific Northwest, Lumber, the great all-purpose material for building, moves faster to consuming markets of the East and Southeast via

The Minneapolis & St. Louis Railway

For the long journey through the Midwest, routings via the Peoria Gateway save hours of time in transit on cars of Lumber delivered to the M. & St. L. by roads that serve Washington, Oregon, Idaho, Montana, Northern California and Western Canada.

Thousands of carloads of Lumber and the other products of western woodlands roll each year over the fast M. & St. L. route to Peoria, where they are switched to connecting lines for the final runs to big eastern Markets.

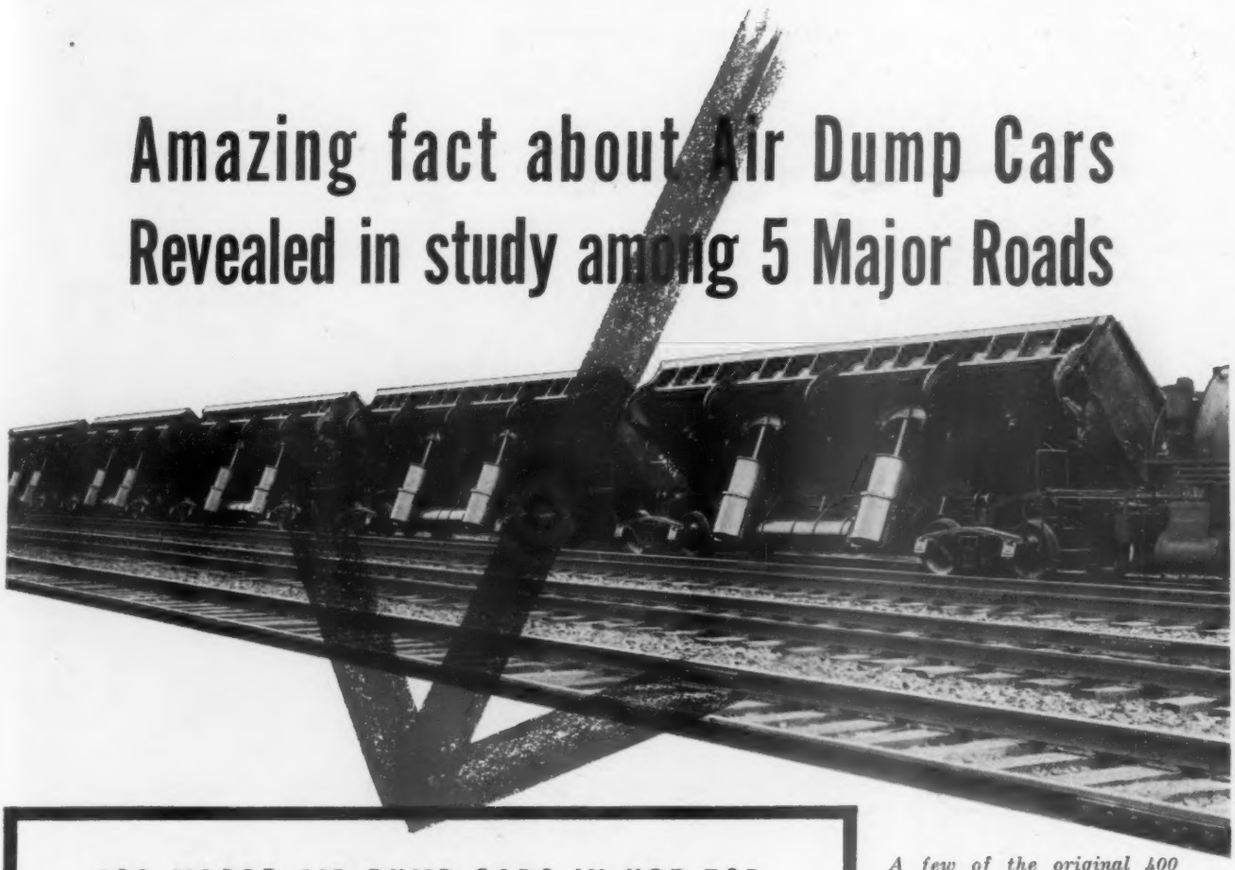
The MINNEAPOLIS & ST. LOUIS Railway

FAST FREIGHT SERVICE for the Lumber and Building Materials Industry

TRAFFIC OFFICES SERVE THE FOREST EMPIRES

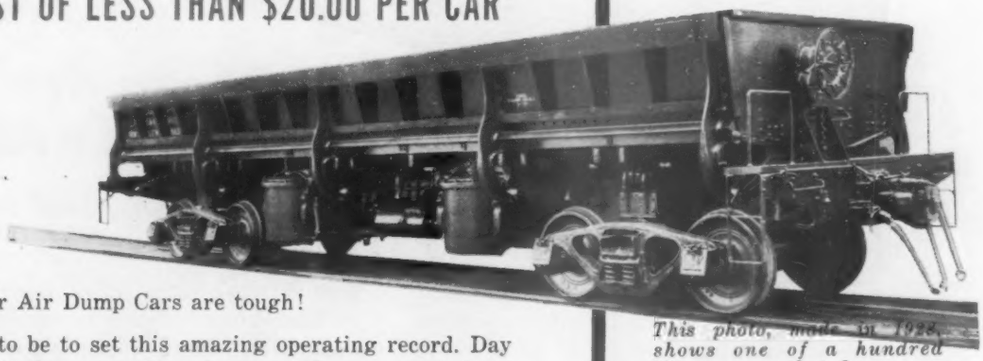
To speed shipments for manufacturers, wholesalers and retailers in the giant Lumber industry, the M. & St. L. maintains offices in Seattle, Portland, San Francisco, Spokane and Great Falls, staffed by Lumber Traffic specialists and linked by teletype with all other M. & St. L. agencies.

Amazing fact about Air Dump Cars Revealed in study among 5 Major Roads



A few of the original 400 Magor Air Dump Cars being tested before leaving the factory for service.

400 MAGOR AIR DUMP CARS IN USE FOR 25 YEARS HAVE ANNUAL REPLACEMENT PARTS COST OF LESS THAN $20.00 PER CAR*



This photo, made in 1928, shows one of a hundred Magor cars that have seen 25 years of continual service with a major railroad. The replacement parts cost has averaged only $10.73 per car per year.

Tough?

You bet Magor Air Dump Cars are tough!

They have to be to set this amazing operating record. Day in and day out, these cars have been called upon to perform grueling maintenance of way work under all operating conditions. Yet, actual performance records prove that the cost of replacement parts furnished by Magor equals only 1/10th of 1% of the purchase price per car per year.

Yes, for efficiency, dependability and low operating costs, you just can't beat Magor Air Dump Cars.

Write today for complete information.

MAGOR

* *A request on your letterhead will bring a copy of this survey and the names of the five major railroads.*

MAGOR CAR CORPORATION ■ 50 CHURCH STREET, NEW YORK 7, N. Y.

How to make packings last longer

Tips by Johns-Manville Engineers to help you keep equipment running

. . . and this new chart makes it easy to choose the right J-M Packings for your requirements

THIS handy 6-page Johns-Manville packings guide, simplifies your selection and application problems on packings. Covering 32 of our most popular styles, it tells at a glance what J-M packings to use . . . why they are recommended . . . and how to install them.

Its schematic diagram is spot-keyed to help you locate packing styles for various services. Its group-headings help you select J-M packings for centrifugal and rotary services, reciprocating rods and plungers, valve stems, pipe flanges, manholes and handholes . . . to seal against steam, air, oil and water etc. . . . to withstand various temperatures and pressures. Its condensed packing descriptions give you essential ordering information . . . and there is a page devoted to tips on proper installation to help you get maximum economy and efficiency from your Johns-Manville packings.

We will be glad to send you a copy of this handy packing selector. Write Johns-Manville, Box 60, New York 16, N. Y.

JOHNS-MANVILLE JM PRODUCTS

Johns-Manville PACKINGS & GASKETS

Section of parlor-dome car on Burlington's new Kansas City Zephyr, with view of stairway leading to dome.

Corner of one of the Zephyrs' spacious and comfortable drawing rooms.

nstalling Exide-Ironclad batteries at The Budd Company plant where cars were built.

ON THE BURLINGTON'S GREAT NEW ZEPHYRS

Exide-Ironclad BATTERIES

Nineteen years ago America's first diesel-powered streamliner with its unique stainless steel cars rolled out of the Budd plant in Philadelphia. It was the original Burlington *Zephyr*, soon to make railway history with its famous dawn-to-dusk non-stop run from Denver to Chicago.

Since then many *Zephyrs* have been added to the Burlington fleet. Now come four others, the *Kansas City Zephyrs* and the *American Royal*, the ultimate in travel comfort, convenience, safety. Power for car lighting, air-conditioning and other electrical services is provided by Exide-Ironclad batteries, assurance of:

Ample Power for bright, steady lights and comfortable cars . . . Trouble-free Performance . . . Low Operating Costs . . . Low Maintenance Costs . . . Low Depreciation Costs. And Exide-Ironclad meets space and electrical requirements of various car designs.

HERE'S WHY YOU GET MORE WITH EXIDE-IRONCLAD

Positive plate, containing corrosion-resistant Silvium, is different . . . unique . . . exclusive! No other type of positive plate can offer you the advantages of the Exide-Ironclad with its slotted tubes, permanently sealed with the new polyethylene bottom bar. More active material is exposed to the electrolyte . . . greater power. More active material is retained . . . providing higher battery capacity for a longer working life.

Other features include improved negative plates, new sealing compound, shock-proof molded container, unbreakable plastic vent plugs. Types, sizes and capacities for all heavy-duty battery applications in railway service.

EXIDE-IRONCLAD IS YOUR BEST BATTERY BUY...*AT ANY PRICE*

THE ELECTRIC STORAGE BATTERY COMPANY, Philadelphia 2 • *Exide Batteries of Canada, Limited, Toronto*

"EXIDE-IRONCLAD" and "SILVIUM" *Reg. T.M. U.S. Pat. Off.*

1888...DEPENDABLE BATTERIES FOR 65 YEARS...1953

G·R·S Centralized Traffic Control

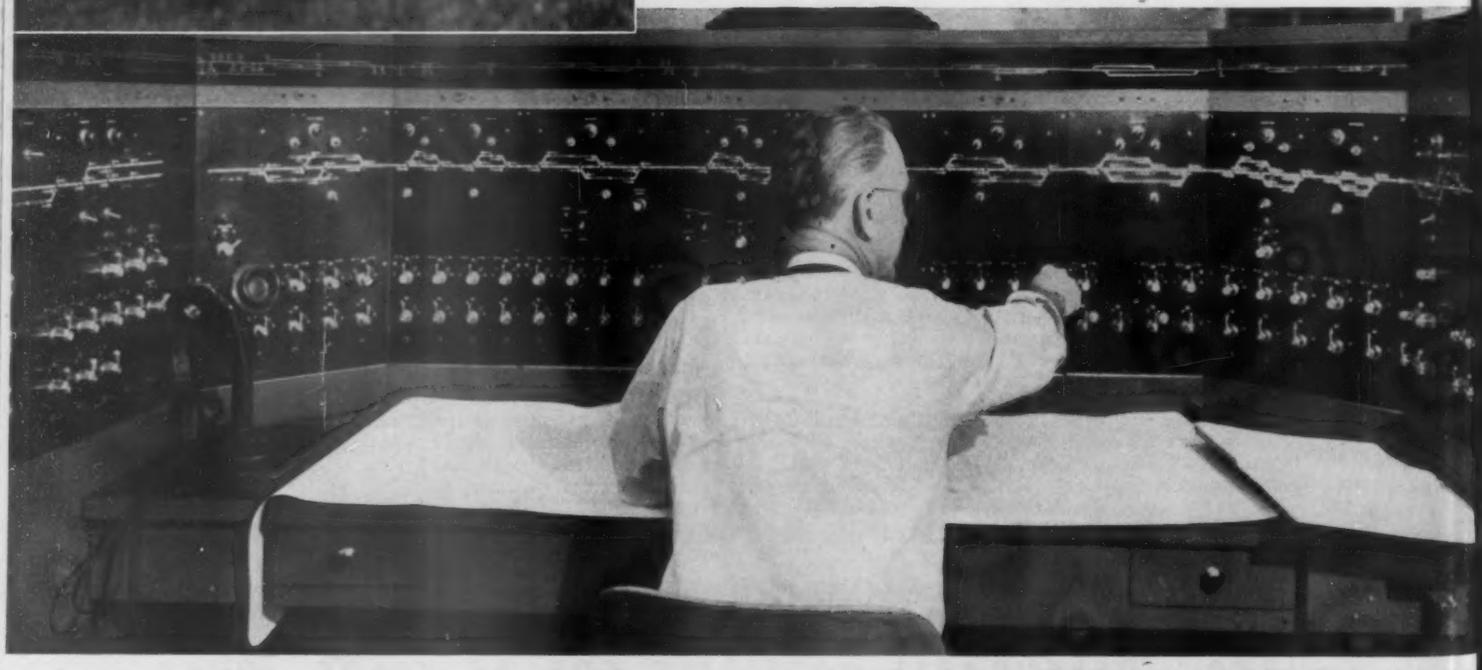
PAYS FOR ITSELF!

INSTALLATION. G-R-S cTc on 103 miles of busy single-track over rough mountain terrain, with heavy grades, considerable curvature, and 22 tunnels.

BENEFITS. More efficient use of track facilities, smoother train operation, better on-time performance. Trains are kept moving; non-stop meets are common.

SAVINGS. About $180,000 saved per year in operating expenses.

Experience indicates that G-R-S cTc installations pay for themselves in a few years. Ask your G-R-S district office for studies and estimates.



GRS

GENERAL RAILWAY SIGNAL COMPANY

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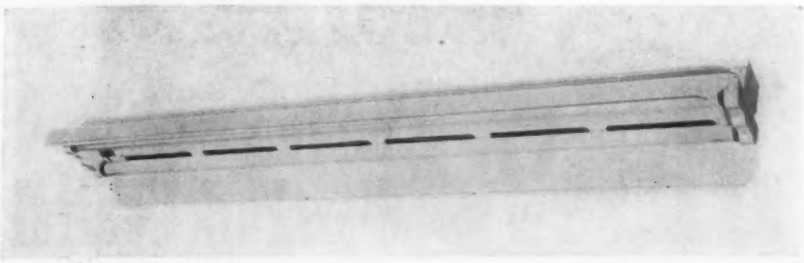
A-2570

GRS



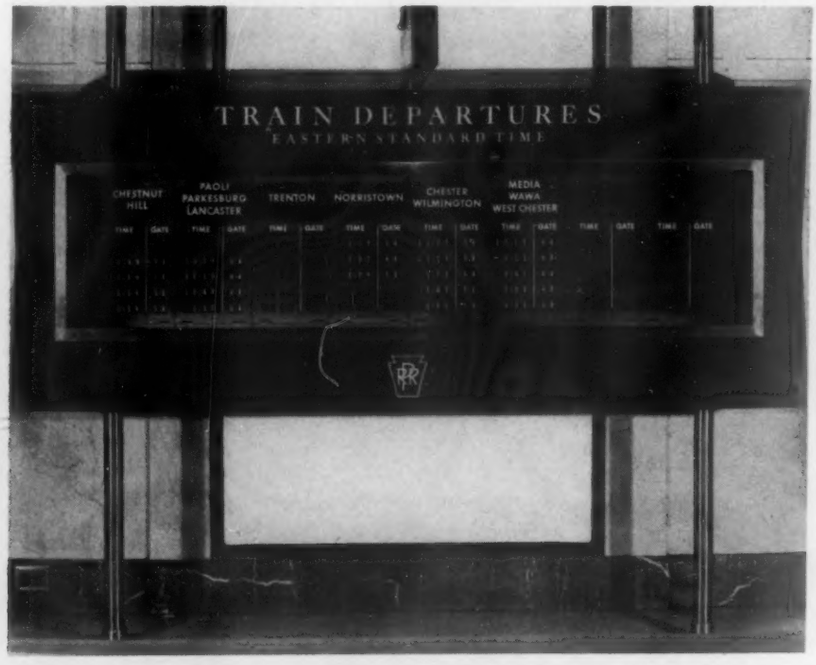
Upward Component Luminaire

An industrial luminaire, type SDP, which provides more comfortable seeing conditions by means of an upward component, is now available from the Westinghouse Electric Corporation, Pittsburgh 30, Pa. It uses two slimline lamps of 38, 58, or 75 watts each.

The upward component, which distributes 23 per cent of the light towards the ceiling, eliminates the severe contrast between bright luminaires and dark ceiling.

Styled for heavy industrial use the luminaire provides the upward component by slots located over the lamps on each side of the reflector. The all-white hood is heavily ribbed and consequently has lost none of its strength due to the introduction of the slots. The porcelain enamel reflecting surface is one piece and is easily removable for cleaning. It uses the new lead-lag slimline ballast.

Back-to-back lamp spacing is provided, and adjustable slide action hangers are available. Also available is a longitudinal shield to provide 27-deg. shielding.



THIS NEW train departure bulletin board—one of six recently installed in the Pennsylvania's Suburban station at Philadelphia—is similar to quotation boards used in brokerage houses to display stock prices. The Philadelphia station boards, designed and manufactured by the Teleregister Corporation, of New York, and installed by railroad forces, are believed to be the first of their type in any railroad station. All six boards are governed by a single adding-machine-type control, placed with an unobstructed view of one of the boards, so the operator can immediately detect any error which may be made in setting them. Electric power used to operate the boards is 110-volt, 60-cycle, a.c.

Test Meter for Mobile Two-Way Radio

A new portable multirange voltmeter and milliammeter, providing in one instrument the means for making the electrical measurements necessary to install and service two-way radio communications systems, has been announced by the engineering products division of RCA Victor Division, Radio Corporation of America, Camden, N.J. The new general purpose test meter, RCA Type CX-7A, will measure current, voltage, and comparative radiated power. It is so designed that several related functions can be checked with a single arrangement of test leads, provided the equipment has built-in metering sockets or proper point-to-point checking facilities.

The equipment is provided with a short "sniffer" antenna to enable the meter to measure relative radiated power in the immediate field of a transmitting antenna. The meter movement has a sensitivity of 50 micro-amperes for full-scale deflection. The accuracy of the CX-7A is ±4 per cent.

Clean Quick Shave on the New York Central

International power maintains right-of-way in top condition

International's Super A, pictured going at it, mows along the NYC's right-of-way. It is cutting finger-thick hardwood saplings while traversing rough ground.

And it's doing a job of right-of-way maintenance quickly, easily and at lower cost.

If you want to shave maintenance costs, see your International Industrial Distributor today. Get the facts on putting International power to work for you.

INTERNATIONAL HARVESTER COMPANY
CHICAGO 1, ILLINOIS

MOWS 'EM DOWN. International's Super A Tractor and matched mower cuts a five-foot swath at 2 to 5 m.p.h. depending on terrain.

POWER THAT PAYS

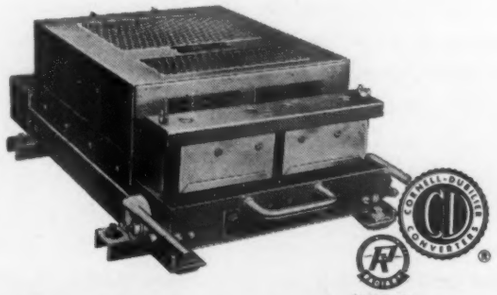
INTERNATIONAL HARVESTER

INTERNATIONAL

The first VIBRATOR CONVERTER-field-proved and accepted for railroad duty!

The C-D Vibrator Converter is already being widely used on many of America's leading railroads. ***Assures uninterrupted radio communications:*** **C-D's patented dual vibrator circuit, with automatic switch-over, services itself en route.** ***Like found money in the communications budget:*** **Saves 60% on cost of initial installation; saves 50% each year on maintenance costs.**

Write for technical bulletin: Cornell-Dubilier Electric Corp., Dept. RA23B, Indianapolis Division, 2900 Columbia Avenue, Indianapolis, Ind. Affiliate Member A.A.R.



CONSISTENTLY DEPENDABLE

CORNELL-DUBILIER

VIBRATOR CONVERTERS *with Railroad Dependability*

PLANTS IN SOUTH PLAINFIELD, N. J.; NEW BEDFORD, WORCESTER, AND CAMBRIDGE, MASS.; PROVIDENCE, R. I.; INDIANAPOLIS, IND.; FUQUAY SPRINGS, N. C.; AND SUBSIDIARY, THE RADIART CORP., CLEVELAND, OHIO

Benchmarks and Yardsticks

A TRAINMASTER on a western line tells a heartening story of success in enforcing Rule G—heartening not only in the sense of promoting safer railroading, but in rehabilitating employees who were ruining their lives by excessive drinking. This trainmaster had the full cooperation of general chairmen of the unions concerned—he sought and got it in advance before he "moved in."

In one case, the offending employee, a conductor, was warned—which warning he did not heed. In the ensuing investigation there was plenty of supervisory testimony to establish his delinquency; calling upon fellow-employees to testify against a man is avoided whenever possible. This conductor was discharged and kept out of service for 11 months—and was not reinstated until he was able to satisfy the management that he had overcome his alcoholism.

This conductor has now been back on the job for two years with a clear record. His wife and children are better provided for. He is saving money for the first time in his life, and he has told the management that the way they dealt with him was "the best thing that ever happened to me."

In another instance, an alcoholic conductor was kept out of service for 6 months and was reinstated only when he signed away his running rights, retaining those of a trainman. The supervision in his case concluded that he wasn't the type who could exercise authority—and that the only safety for him lay in working under a conductor who would stand for no "monkey business." The system union chairman also cooperated in this case—which is working out satisfactorily: the employee has a safe job and the railroad a safe employee.

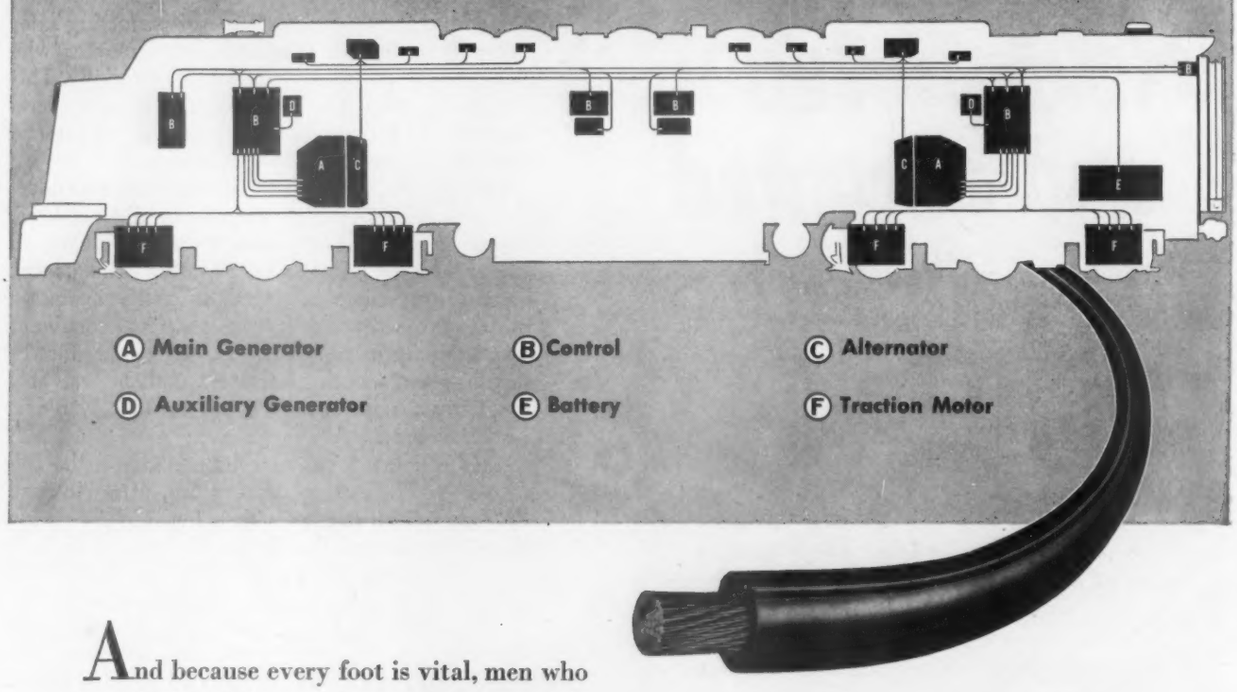
The management does not take determined disciplinary action for trivial infractions. Our informant summarizes the approach as follows:

1. Personal talk with the offender, warning him that he is going to be checked.
2. When check is made, have sufficient supervisory officers present to supply a preponderance of testimony.
3. Conduct of the investigation so that the record of guilt is clear beyond question.
4. Discharge the employee when found guilty.
5. No restoration to duty until his actions have proved beyond a reasonable doubt that he has conquered the habit.
6. If again found in violation of the rule, discharge with no restoration to duty.

He adds that most of the employees who have successfully overcome this trouble have done so through participation in "Alcoholics Anonymous."

J. G. L.

7000 feet of wiring
...and every foot is vital!



And because every foot is vital, men who build Diesel electric locomotives usually specify Okonite-Okoprene Diesel Locomotive Wiring. It's especially built for Diesels, to meet rigid Diesel requirements.

The more than 1¼ miles of wiring on a Diesel electric locomotive, for example, should give perfect electrical performance while under constant attack from moisture, oil, abrasion and high temperatures. Here's how Okonite-Okoprene performs this task:

★ **Okonite insulation—proved in railroad service for nearly 75 years—retains its tensile strength, elasticity and high electrical values throughout a long service life.**

★ **Okoprene sheath—tough and rugged—will not rot or deteriorate with moisture...is particularly resistant to petroleum products in general railroad use . . . withstands persistent abrasion . . . will not support combustion or communicate flame along the cable.**

Because of its doubly durable construction, Okonite-Okoprene DEL Wiring is fast replacing varnished cambric and other types of insulated wire for vital generator and motor leads, headlight wiring, controllers, cab signal circuits and others. For detailed information and dimensional data on DEL Wiring, write today for Bulletin RA-2078A to: The Okonite Company, Passaic, N. J.

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OKONITE SINCE 1878 ***insulated wires and cables***

LABOR RELATIONS, AN OPEN SPIGOT

One of the most observing of the railroad industry's public relations officers said a few days ago: "The railroads seem to be making some headway in getting wider recognition of the public interest in relaxing the severity of rate and service regulation, and in establishing some degree of equality in the way competing agencies of transportation are required to pay taxes and pay their own keep. I do not detect, however, any movement to give the railroads equality with other industry in the degree to which the government intervenes in behalf of unions. Operations under the Railway Labor Act are much more restrictive on the employer than the Taft-Hartley Act is."

This observer went on to say that there's not much gain for the railroads in getting relief in regulatory limitations and in more equitable competition—if the only net result will be that all the benefits of these reforms, and maybe then some, will be carried off by the unions. The railroads' position, that is, is not likely to be improved until either (1) the railway unions moderate their demands or (2) the law allows the railroads more freedom in resisting these demands.

The current proceeding for "productivity" wage increases, now in the hands of a presidential referee, is a case in point. Unionized employees are now getting, under a "cost-of-living" agreement, automatic wage increases to reflect any decline in the purchasing power of their earnings. When this agreement was reached, railroad wages were increased substantially to make them, at least, competitive with wages in other industry. In fact, railroad wages were raised to an average much higher than in the manufacturing industry—$1.64 per hour in manufacturing as of last October, compared to $1.88 per hour on the railroads.

In other words, having already eaten their cake in the form of a more-than-competitive wage scale (as compared to other industry), the railway unions now want another portion of the same cake in the form of a retroactive "productivity" increase. The wage increase they got, of course, gave them all the compensation that "productivity" or any other merits entitled them to.

The logic of the unions' position is equivalent to that of the boy whose father offered to pay him $1 an hour for trimming the lawn. The boy accepted and did the job in 5 hours, and then presented his father with a bill for $11—$5 for the time he actually put in, another $5 for the job he missed doing for a neighbor because he was already working, and another $1 which he saved his father by not going to the movies.

The economic facts involved in these wage cases are presented with great skill, intelligence and devotion by railroad officers of long experience. But the question invariably arises—whether the union officers to whom these facts are presented are in a position to admit their validity, however persuasive they may be. The constituents of the union leaders do not know these facts—all they know is that Joe Blow, the leader of their union, gets more (or vice versa) for them than Joe Doakes, the leader of the rival union. Messrs. Doakes and Blow are not judged, and do not hold their jobs, because of their judicial temperament or their skill in analyzing economic data or for any other reason than their success in "bringing home the bacon."

And maybe what they bring home that looks like bacon in the form of higher wages may turn out to be something less palatable when it results in higher rates which drive away traffic and destroy railroad jobs.

There exists at least a reasonable doubt whether a wage case stands much chance of being decided on its intrinsic merits by collective bargaining—so long as the law reposes all the "economic power" in one of the parties and heavily weighs the scales against the other contender. The consequence is that most of these disputes go to some form of "fact-finding" or "refereeing"—with one party heavily obligated to accept the verdict, and the other not obligated at all. And is the quality of the "fact-finding" and "refereeing" in keeping with the economic importance of the disputes—some of them involving hundreds of millions of dollars and, cumulatively, the very existence of the railroads as private industry?

On the average, the ability of the men who are called in to pass judgment upon these disputes has been higher than could be fairly expected in view of the modest compensation in money and honor accorded to these assignments. Is it reasonable, though, to entrust issues, which on the average mean far more to the national welfare than most of the cases weighed by our highest courts, to judges of less experience and proved ability than those who man the highest tribunals in the land?

So long as the railroads and the business community limit their interest in reform of governmental relations

to transportation to questions of equitable regulation and taxation—while largely ignoring the kind of government intervention which exists in labor relations—railroad resources are likely to be dissipated at the spigot just as fast as they can possibly be replenished at the bunghole.

It will take many years of patient effort to acquaint railroad employees with the direct bearing of wage costs on railway rates and, hence, on the security of railway jobs; and also on the minimum earnings required to keep railroad plant attractive to traffic and to prevent it from gradually withering away. It is doubtful, however, whether the railroads can hope for any real security of their assets until such knowledge is much more widespread among employees than it is now. Many industries whose problem in this sector is much less acute and threatening than that of the railroads are working harder than the railroads are to enlighten their employees about such things.

How Trucks Help Railroads

By R. J. LITTLEFIELD
General Tax Agent, Pennsylvania

Trucks have aided and improved railroad transportation service by making it easier for most people to ship most things by rail—by speeding delivery to and from railroad terminals. And—many more trucks are engaged in this kind of work than there are in the business of competing with railroads for long-haul commercial transportation. Only 5% of all trucks can possibly be considered as railroad competitors. Ninety-five per cent supplement railroad service and service of common carriers by air, water and pipelines. They deliver milk, coal, oil, flowers, groceries, clothes, furniture and a host of other merchandise, door to door, and from wholesale terminals to retail stores. They encourage the further development of suburbs. Others work on farms, serve as fire-engines, do hundreds of jobs horses formerly did—and do them better.

The largest fleets of trucks belong to the telephone industry, Post Office and Railway Express Agency. . . . The railroads are themselves among the largest owners of trucks. . . .

The biggest of all classifications of trucks is farm trucks. About 2,200,000 trucks are on farms. Nearly all of them spend most of their lives on the farm roads near where they are owned.

The total number of light delivery trucks is not known exactly, but probably rivals the number of farm trucks and is the second largest truck classification. These trucks operate mostly on city and town streets and deliver the packages, the groceries, the laundry, the milk and similar household needs. Thousands of larger local trucks deliver oil, coal, building materials and other bulky goods.

The farmers, the merchants and the companies that own and operate some 8,700,000 trucks want substantially the same things that the owners of the nation's 44 million passenger cars want. They want room to park, and to load and unload. They want reasonable costs for operation and reasonable taxes. They are willing to pay for good roads and more bridges—but they want to pay only their fair share for these improvements.

Five per cent of the trucks are used for long-haul commercial traffic. They operate largely on the main highways between cities. They weigh from 12,000 to 20,000 pounds empty and carry from 20,000 to 50,000 pounds of cargo. Maximum state limits on gross weights vary from 42,000 to 128,000 pounds, but violations of these loading limits are frequent. The typical long-haul highway freighter east of the Mississippi River is 40 to 45 feet long from bumper to bumper, 12½ feet high, 96 inches wide. (For comparison a Cadillac is 18½ feet long, 5 feet 4 inches high and 80 inches wide.)

The owners of the 450,000 trucks are competing with railroads in the business of hauling freight. They pick and choose what business they want, and naturally seek the most profitable traffic. In many cases they now quote lower rates than railroads. But there is a lot of business available that the long-haul truckers can get at rates that are higher than railroads—if their rates are not *too much* higher. Therefore to succeed in business they must keep their operating costs including taxes lower than the railroads. Their costs for labor are high. A train crew of five men on a 100-car train can move as much freight as 115 truck drivers. So long-haul truckers cannot afford to pay 22 cents out of every revenue dollar as railroads do for state and local taxes and build and maintain the roadway they use.

One outstanding reason why long-haul truckers have succeeded is the fact that the private motorist and short-haul trucker have paid more than their share, and the long-haul trucker less than his share, of the cost of building and maintaining public highways. At present they pay less than four cents of each revenue dollar to use public highways and for state and local taxes.

Also to get as great an efficiency as possible with such an extravagant use of manpower, the long-haul trucker needs to carry as much load as possible behind one driver. As truck sizes and weights have increased in response to this economic urge, state legislators who are concerned with damage to highways and bridges, with increasing highway construction costs, and with traffic congestion and accidents have passed laws restricting the weights and speeds upon which the trucker depends for much of his profit.

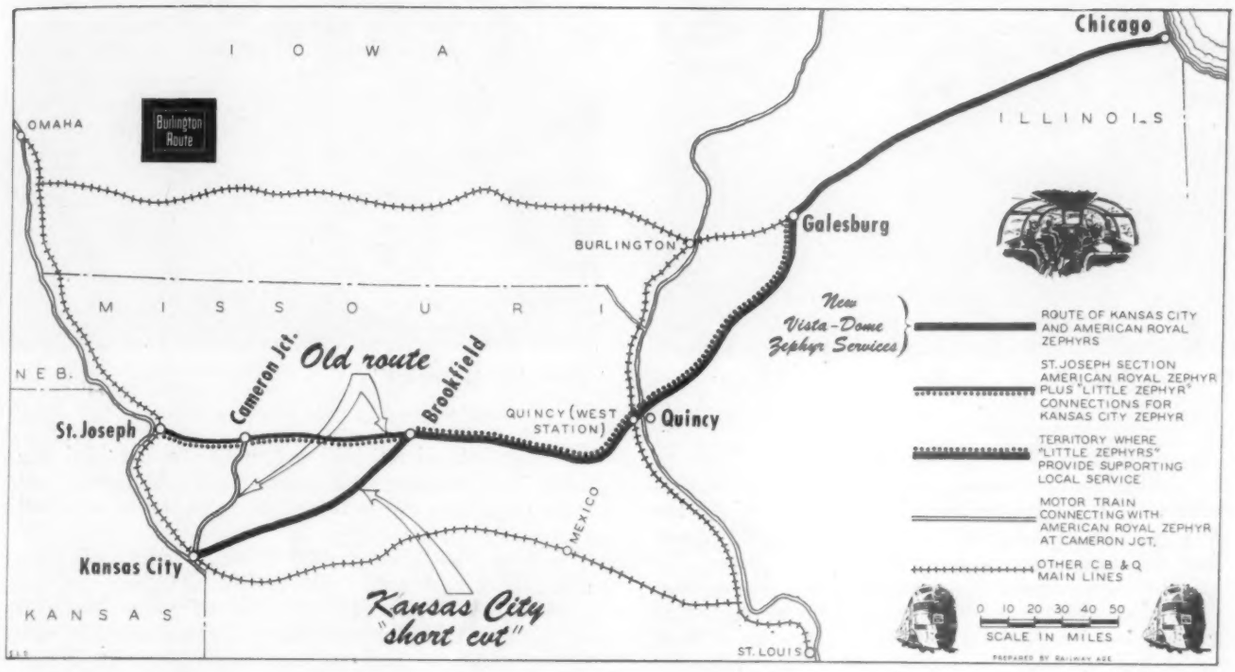
To prevent this trend from developing the owners of these 5% of the trucks have formed associations in every state which are usually named "Trucking Associations." In all cases they have gotten some owners of the 95% of the trucks that are interested only in short-haul or light-weight transportation to join. But the objective that these "Trucking Associations" seek is always entirely concerned with the economic need of the long-haul heavyweight truckers to keep their costs and taxes at a level which will allow them to take business away from the self-supporting, full-tax-paying railroads.

The railroads favor good roads for the owners of 99% of the vehicles—the 8,700,000 trucks and 44,000,000 passenger cars—who, with railroads as general taxpayers, must pay for them. They oppose spending about twice as much per mile to maintain roads for 1% of the vehicles, whose owners contribute little to pay the additional costs.

The railroads seek no unfair advantage and they wish to impose no burden of prejudiced restrictions on trucks.

The Pennsylvania Railroad's objective in these matters is simple: we favor open competition among all forms of transportation on equal terms. Let the operator of each form of transportation pay the full cost of his operation, charge the least he can, give the best service he can—and then let each customer choose the railroad, the trucking company, the airline, the barge, or whatever other form of transportation that best suits him.

If the customer is king, and the ground rules for all public servants are equal, the customer will be served well, and those that serve the customer best will succeed.



Burlington's Kansas City Short-Cut . . .

"Kansas City Zephyr" "American Royal Zephyr"

Brand new services with brand new trains on a brand new railroad

It isn't too often these days that a railroad comes up with plans to double the service of an existing main-line passenger route. So when one does, and then adds that the trains will be completely new dome-streamliners, it is cause to sit up and take notice.

On February 1, the Chicago, Burlington & Quincy began accelerated double-daily service between Chicago and Kansas City with four new stainless steel vista-dome streamliners—two daytime "Kansas City Zephyrs" (one train unit a day each way) and two overnight "American Royal Zephyrs" (which also provide through de luxe coach and sleeping car service between Chicago and St. Joseph, Mo.).

Heretofore, the Burlington had operated but a single through train between Chicago and Kansas City and St. Joseph—the 13-hour overnight "American Royal"—a diesel-powered train with "standard" coaches and sleeping cars. Today the "Kansas City Zephyr" is making the daylight trip in as little as 8 hours while the overnight "American Royal Zephyr" travels to Kansas City in 9 hours 55 minutes; to St. Joseph in 10 hours, 45 minutes.

But there is more to the Burlington's Kansas City passenger story:

● New local passenger schedules, and connecting service to and from St. Joseph for the daytime runs, are also being handled by streamlined equipment—by that "patriarch" of streamliners, the "Pioneer Zephyr," and by the "Mark Twain Zephyr," another early member of the fleet.

● The general pace of Kansas City-Chicago service—as well as that between St. Louis and the North via Burlington, Iowa—has been materially quickened by relocation of all passenger station facilities at Quincy (Ill.) West Station, eliminating time-consuming bridge crossings to reach the former station in Quincy proper on the east side of the Mississippi. Ground already has been broken for a completely new and modern "west station," which probably will be completed late in 1953.

● The most important contributing factor in the improved Chicago-Kansas City service, however, is the new 71-mile Kansas City Short Cut (see map), built at a cost of over $16 million to circumvent the Burlington's old main line via Cameron Junction, Mo., which has too much curvature and grade to allow "fire engine" railroading. Construction of the Short Cut—which involved 48½ miles of entirely new railroad plus renovation of 21½ miles of existing branch and secondary lines

"Pioneer Zephyr"

"Mark Twain Zephyr"

—brought Kansas City 22 Burlington miles closer to Chicago with a relatively gradeless, curveless line tailor-made for fast passenger operation. It has provided the Burlington with the second shortest rail mileage between these two major cities and for the first time placed the "Q" in a position to offer passenger service performance competitive with that on the slightly shorter main line of the Santa Fe. The story of this strategic new Short Cut is told on page 74 of this issue. A description of the new equipment built by the Budd Company for the two new "Zephyrs" begins on page 77.

Few persons in Chicago, Kansas City, St. Joseph or any of the principal on-line communities could have remained unapprised of the new double "Zephyr" service when it went into effect. A carefully planned campaign of advertising and publicity heralded the debut in newspapers and magazines, on billboards and radio programs, and in ticket office and station windows all up and down the line.

Nor was this effort limited to simply announcing the new service. The public was invited to inspect the new equipment and even ride in it on 90-minute, low cost excursions. A special exhibition train, composed of cars representative of both the day and night trains, went into exhibition and excursion service on January 23 at Chicago where, following a short advance showing to the press and other invited guests at 9 a.m., it remained open for public inspection in Union Station until 7 p.m. The following day it made five excursion trips to Aurora, Ill., plus a longer trip to Earlville.

HERE'S HOW THE NEW SCHEDULES . . .

Westbound					Eastbound		
New Route Miles from Chicago	#55 American Royal Zephyr	#35 Kansas City Zephyr	Daily		#36 Kansas City Zephyr	#56 American Royal Zephyr	New Route Miles from K.C.
0	10:00 p.m.	12:30 p.m.	Lv Chicago	Ar	8:00 p.m.	7:55 a.m.	466
162	12:40 a.m.	3:03 p.m.	Lv Galesburg	Ar	5:42 p.m.	5:10 a.m.	304
262	3:10 a.m.	5:10 p.m.	Lv Quincy (West Station)	Lv	3:45 p.m.	2:55 a.m.	204
466	7:55 a.m.	8:45 p.m.	Ar Kansas City	Lv	12:01 p.m.	10:00 p.m.	0
468	8:45 a.m.	*9:55 p.m.	Ar St. Joseph	Lv	*11:00 a.m.	8:30 p.m.	. . .

*Connecting Zephyr service between Brookfield and St. Joseph

. . . COMPARE WITH THE OLD

Westbound				Eastbound	
Old Route Miles from Chicago	#55	Daily The American Royal		#56	Old Route Miles from K.C.
0	6:30 p.m.	Lv	Chicago	Ar 8:25 a.m.	490
162	10:30 p.m.	Lv	Galesburg	Lv 4:55 a.m.	328
262	12:40 a.m.	Lv	Quincy	Lv 2:45 a.m.	228
490	7:30 a.m.	Ar	Kansas City	Lv 8:00 p.m.	0
468	7:10 a.m.	Ar	St. Joseph	Lv 8:15 p.m.	. . .

AND HERE'S THE NEW EQUIPMENT LINEUP . . .

For the "Kansas City Zephyrs"

Chicago-Kansas City
Reclining Seat Coaches
Vista-Dome Buffet-Lounge (For all passengers)
Dining Car
Vista-Dome Parlor-Observation
Chicago-St. Joseph
Connecting Service at Brookfield, Mo., with "Pioneer" and "Mark Twain Zephyrs"

For the "American Royal Zephyrs"

Chicago-Kansas City
Reclining Seat Coaches (Equipped with leg and foot rests)
Vista-Dome Buffet-Lounge (Serving evening refreshments and breakfast)
10 Roomette-6 Double Bedroom Sleeping Car
6 Section-6 Roomette-4 Double Bedroom Sleeping Car
Chicago-St. Joseph
Reclining Seat Coaches (Equipped with leg and foot rests)
6 Section-6 Roomette-4 Double Bedroom Sleeping Car

VETERAN PLAYERS TAKE KEY SUPPORTING ROLES

There is still a need for local passenger service on the Burlington's Chicago-Kansas City route. To fulfill this need between Galesburg, Quincy and Brookfield, the "Q" has deployed its original Budd-built, Electro-Motive-powered "Pioneer Zephyr" (still going strong after an estimated 2.5 million miles), and the nearly as venerable "Mark Twain Zephyr" which was built one year later (1935).

Working as a team, these little 4-car streamliners relieve the new vista-domed through trains of local chores between Galesburg and Brookfield. They also provide connecting service to St. Joseph for the daytime "Kansas City Zephyr" at Brookfield. East of Galesburg, local service is provided by diesel-powered trains scheduled within the pattern of main line Chicago-Omaha-Denver services.

On January 25 the special train carried a similar group of sellers and agents from Kansas City over the new Short Cut to Brookfield and return. Public exhibition and sample excursions to Hannibal, Mo., were provided at Quincy on January 26.

The Kansas City Chamber of Commerce, on January 27, held a public affairs luncheon to honor Burlington President Harry C. Murphy. This affair was followed by an excursion trip for chamber members over the new line. Subsequent exhibitions were held at Atchison, Kan., and Leavenworth, which, although not on the route of the new "Zephyrs," are close enough to St. Joseph and Kansas City to be important sources of passenger traffic. January 28 found the train on exhibition at Macon, Mo., and Brookfield and operating public excursions out of Brookfield and Chillicothe. That day was completed with a two-hour exhibition at Chillicothe.

Next, on January 29, a 5½-hour exhibition at St. Joseph was followed by three excursions to East Leavenworth (located on another route of the "Q") while January 30 was taken over by a 12-hour exhibition in Kansas City Union Station.

Another Christening Recalled

Christening ceremonies opened the final day's activities at Kansas City. Participants included the "Queen of American Royal"—Miss Judith Anderson of Liberty, Mo.—and her court, in the presence of a large crowd of spectators and the television and radio audiences of Kansas City's WDAF. On hand were the mayors of Kansas City and other nearby cities and towns. And watching with special interest as champagne bottles were broken—first on the observation car of the "Kansas City Zephyr" and then on the diesel locomotive of the "American Royal Zephyr"—were N. C. Dezendorf, vice-president of General Motors and general manager of its Electro-Motive Division; Fitzwilliam Sargent, vice-president of the Budd Company; and Burlington President Murphy.

Their thoughts were going back to another christening that took place in 1934 just after Electro-Motive and Budd had completed the Burlington's "Pioneer Zephyr"—now considered to be the granddaddy of all streamliners. A special guest was H. L. Hamilton, a vice-president of General Motors, who was a pioneer in putting the internal combustion engine on rails and in no small way was responsible for the creation and success of the first "Zephyr." After the ceremonies, five public excursions to East Leavenworth wound up the festivities just in time to arrange the equipment for scheduled service starting the next morning.

All of the exhibitions and excursions were announced in advertisements which also detailed the new service in terms of local interest. After the trains entered service on February 1, a follow-up ad campaign began in business and travel magazines including also a limited number of local magazines published by social and civic organizations in Chicago and Kansas City.

Certainly it cannot be said that the "Kansas City Zephyr" and the "American Royal Zephyr" entered service as strangers to their native territory.

TWENTY HOURS was the running time between Chicago and Kansas City back in 1886 when "The Eli" was the Burlington's premier train between those cities. This interesting old picture was taken in July 1886 as "The Eli" passed through Sandwich, Ill., at a speed of 55 miles an hour. According to "Q" historical records, "The Eli" was the first Burlington "name" train through service between Chicago and Kansas City.

Today's "Kansas City Zephyr" makes this run in as little as 8 hours—and with comforts undreamed of when photographer C. H. Orr opened his lens on the above scene.

A substantial track structure was built on the new line, comprised of 112-lb. torsion-resisting rails on creosoted oak crossties supported by blast-furnace slag ballast placed 12 in. deep under the ties.

Burlington's Kansas City Short-Cut . . .

Engineered to Modern Standards

Using the latest knowledge of soil mechanics and track engineering to minimize future maintenance, the "Q" puts $16-million project into service on schedule

The physical characteristics of the tracks and structures of the Burlington's Kansas City Short-Cut represent the "last word" in modern railroad construction for high-speed operation. The line was projected as straight as possible and built with the maximum curvature of 1 deg. to permit high speeds, while a modern centralized traffic control system, together with long passing tracks spaced at about 10-mile intervals, allows maximum utilization of the line.

A high standard of track construction was established to provide the strength required for high speeds and heavy traffic. A substantial tonnage rating for freight trains was assured by setting the maximum gradient of the new line at 0.8 per cent. And, with an eye to the future, the entire project, completed on schedule at a cost of $16 million, was carefully engineered to facilitate economical maintenance.

The location of the Kansas City Short-Cut is shown on the accompanying map. Plans called for the construction of 6.4 miles of new line between Needles Jct., Mo., and Forker; the construction of 42 miles of new railroad between Tina Jct. and Maxwell; the rehabilitation of 22 miles of the road's existing branch line between Forker and Tina Jct.; and the removal of the branch line between Forker and Laclede. Burlington trains will operate over Wabash tracks between Maxwell and Birmingham.

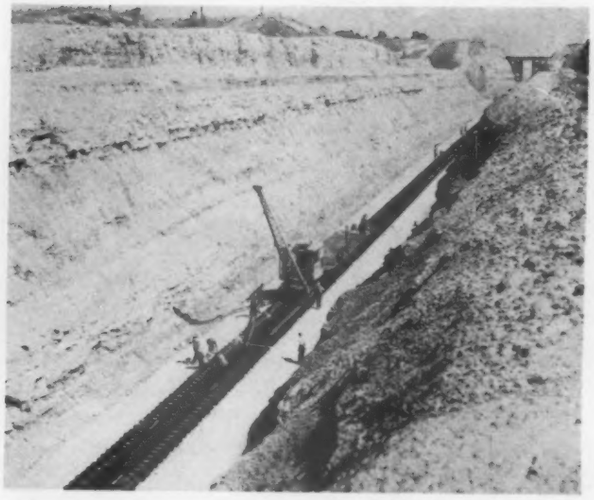
Construction work was begun in 1950 and the project was scheduled to be completed about November 1952. To assure proper timing and progressing of the work, the project was divided into a total of 11 schedules. Freight trains actually began service over the new route on October 28, 1952.

Aerial Surveys Speed Location Work

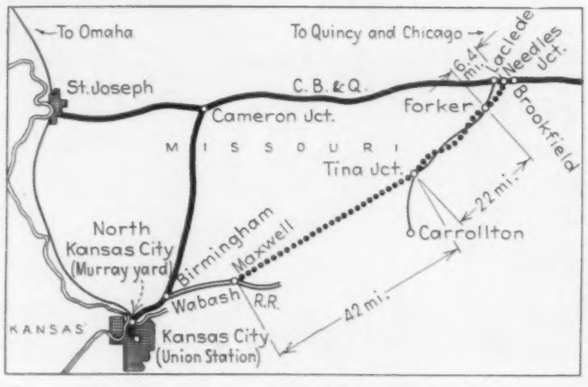
By making use of aerial surveys, the science of photogrammetry,* U. S. Geological Survey quadrangle maps, and recently developed graphic arts materials, the road saved a great deal of time and expense in establishing the new route. Much of the work of a topographer was

*See "Photogrammetry Aids Line Location," *Railway Age*, July 15, 1950.

Modern earthmoving equipment made it possible to limit the maximum gradient of the new line to 0.8 per cent, thus allowing a high-tonnage rating.



Only after huge quantities of rock had been excavated by precision blasting were track-laying operations possible through Summit cut.



The "Short-Cut" line connecting Brookfield, Mo., with Birmingham is the third side of a triangle and is 22 rail miles shorter than the Burlington's former route through Cameron Junction.

Great care was taken in the grading work to obtain a compaction of 95 per cent or better. Six or more passes of a sheepsfoot roller were made to compact each layer of embankment material.

eliminated and the usual mapping by the locating engineer, with the exception of plotting the center line of the projected line, was eliminated. Costs of acquiring land were also kept low because all physical obstacles, such as towns and cemeteries, could be readily avoided when platting the line on the aerial maps. The acquisition of land was also expedited by these maps because they could be easily read and understood by the landowners.

Before construction of the line, a special study was made of highway crossing requirements. Traffic checks were made at each potential location and a joint inspection was made on the ground by railroad engineers and representatives of the Missouri State Highway department and the Missouri Public Service Commission. Each crossing location was evaluated according to the amount of highway traffic carried and the nature of the terrain, and an agreement was reached by the parties as to the type of protection that should be installed, whether a grade separation structure was justified, or whether the crossing could be eliminated entirely. These decisions were discussed with the county officials and in all cases they were found to be in agreement. As a result, only those crossings actually needed were constructed.

Grading Work on Scientific Basis

One of the outstanding engineering accomplishments, and one that will have a marked effect on the future maintenance of the line, was the application of scientific principles of soil mechanics to the grading work.* Two core-drilling outfits were employed during the early stages of the project to reveal subsurface conditions. The data thus obtained, coupled with geological and soils information already known, proved of great value in establishing the slopes of both cuts and fills, as well as giving a general idea of the relative amounts of rock and earth involved.

The nature of the soils and their moisture content were carefully investigated with the objective of achiev-

*See "Stable Roadbed Is Aim on Big Cutoff," *Railway Age*, February 12, 1951.

The deck-plate girder bridge over Wakenda creek is the second longest structure on the new line.

The old branch-line station at Tina was replaced by a new building and station platform.

Grand River bridge is the longest on the "short cut." It consists of a 400-ft. truss span flanked on each side by two 100-ft. through-plate girder spans.

A joint investigation with highway authorities was made of all highway crossing locations before construction work began, resulting in essential crossings only.

ing a 95-per cent or better compaction of the material going into the fills. To this end, a soils analyst, with a field laboratory at his disposal, was on the job at all times, and a soils consultant visited the location frequently to give advice on soil and related problems.

Earth embankment was placed in 8-in. layers and compacted by six or more passes of a sheepsfoot roller. When rock was used as embankment material, it was placed and rolled in 3-ft. layers. The top width of fills up to 15 ft. in height was set at 24 ft., but was increased adequately for greater heights. The roadbed width at the bottom of cuts is substantial enough to assure good drainage and to permit the side ditches to be maintained by mechanical equipment.

Another outstanding engineering feature of this project was the excavation of a long cut through rock formations. Seams of shale made the shaping of ½-to-1 slopes difficult, but precision shooting resulted in the desired side slopes with a minimum of finishing work. Small drilling bits were used to bore holes relatively close together and the charges were set off by delayed-action caps, resulting in a high degree of fragmentation and accuracy in blasting.

As a result of the care exercised in the formation of the fills and cuts, it is believed that no appreciable trouble will be encountered with slides or subsidence. There has been no trouble on these scores to date.

Track Is of Modern Design

A track of modern design was built on the finished subgrade. This includes a 6-in. layer of subballast of crushed limestone screenings, overlaid with top ballast consisting of blast-furnace slag placed 12 in. deep under the ties.

The crossties are No. 4 or No. 5 creosoted oak ties, 8½ ft. long, and the rail is of the 112-lb. torsion-resisting section. The track is fully tie-plated.

About 320 culverts of metal or concrete pipe and 31 reinforced concrete boxes were installed. Other structures include 31 bridges over waterways, 1 over tracks of the Santa Fe, 9 highway overpass bridges and 5 highway underpass structures. Several of these structures are steel; the others are constructed of creosoted material throughout. All bridges carrying rail traffic were designed for E-72 loading.

A coach interior. Windows are 76½ in. wide. Venetian blinds are separate for each seat.

In the Vista Dome on one of the handsome, new "Kansas City Zephyr" cars.

The small parlor section of a dome-parlor-observation car. A passage to the right leads under the dome toward the parlor-observation section.

The coffee shop at the forward end of the dome-coach-coffee-shop-lounge car. The stairway at the rear leads to the dome; the passageway to the rear coach section.

New Cars for the New "Zephyrs"

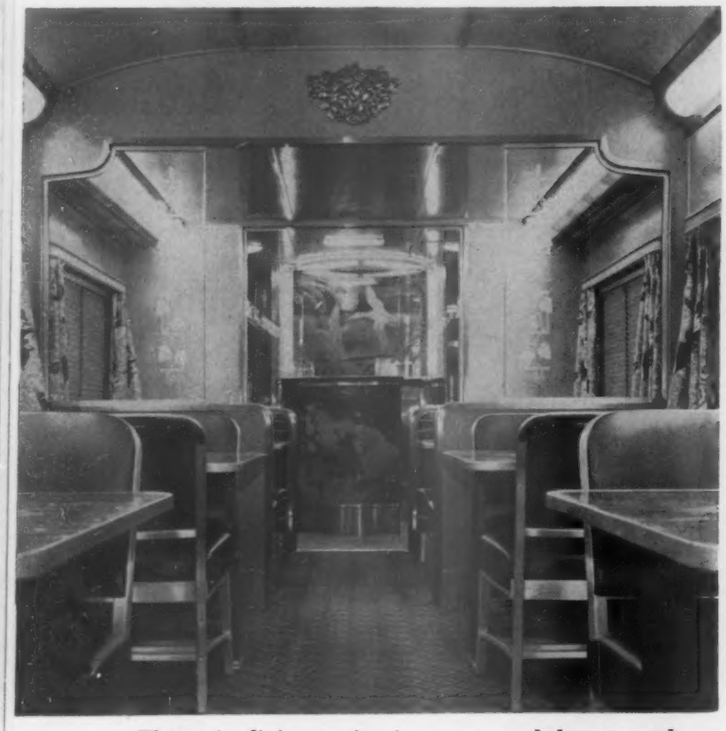
Vista Dome cars, coaches, diners and sleeping-car accommodations from open sections to drawing rooms in fleet of 34 cars built by Budd

The Chicago, Burlington & Quincy has received 31 new passenger train cars of ten types for use in its new "Kansas City Zephyr" and "American Royal Zephyr" trains between Chicago and Kansas City-St. Joseph. These cars, all built by the Budd Company of stainless steel, are passenger-carrying types, except for one 74-ft. railway-post-office-baggage car. The 31 new Burlington cars have been assigned as follows: 17 (including four Vista-Dome cars) to the Chicago-Kansas City-St. Joseph service; six for service between Chicago and St. Paul-Minneapolis on the "Black Hawk"; five (including one Vista Dome car) for the "Ak-Sar-Ben Zephyr" which replaces the "Ak-Sar-Ben" between Chicago and Omaha-Lincoln; three for the "California Zephyr." Three additional cars were built to the same specifications for use in the "California Zephyr," two for the Western Pacific and one for the Denver & Rio Grande Western. The distribution of the cars, by types, is shown in a table.

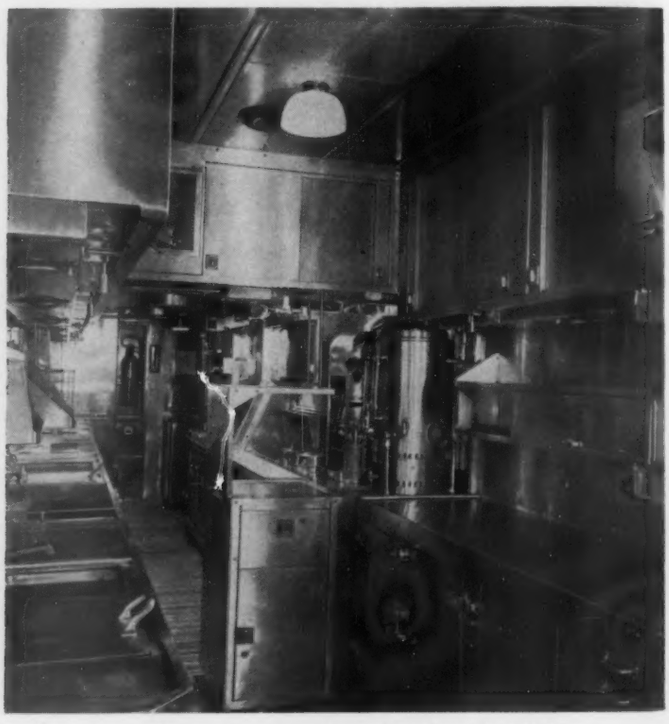
The equipment for the two "Kansas City Zephyrs" (the new day trains between Chicago and Kansas City) includes four coaches with seats for 50 passengers each; two Vista Dome-coach-buffet-lounge cars; two dining cars with tables which can be adjusted to accommodate either 40 or 48 persons, and two Vista Dome-parlor-observation cars. The equipment for the two "American Royal Zephyrs" (the new overnight service between

The intimate lounge under the dome in the dome-coach-coffee-shop-lounge car.

The observation lounge at the rear of the dome-parlor-observation car.



The main dining section is gray green below, ecru above. Upholstery is dark rose; carpet throughout is green.



Looking from the pantry into the kitchen of the dining car. Fresh cooled air is delivered in this area in quantity.

Chicago and Kansas City-St. Joseph which replaced the Burlington's "American Royal") includes four cars with six open sections, six roomettes and four double bedrooms; and two cars with 10 roomettes and six double bedrooms, as well as two dome-coach-buffet-lounge cars, and four 50-passenger coaches.

Decorations have been chosen for attractive but restful effects. Various shades of soft colors such as nut pine, rust, beige, brown, green, blue and various combinations of rose, gray and tan are employed in all of the passenger-carrying cars. Two color combinations are employed in the coaches. In one the walls are of cocoanut brown below and cocoa beige above with cafe au lait ceiling. The carpet is green; the upholstery, turquoise; and the drapes, green, brown, and yellow patterned material. In the other combination the walls are nut pine in two shades. The carpet is henna and brown; the upholstery, rust; and the drapes, patterned green and rose.

The parlor sections of the dome-observation cars have walls in rose tan and ceilings in a delicate tone of beige. Carpets are rose and the chairs are upholstered variously in sandalwood, loganberry and brown. Drapes are lemon color.

These same wall colors are also used in the bedrooms of the sleeping cars. The upholstery in the bedrooms is a combination of gray taupe at the top and down the center of the backs of the seats and in the center of the cushions, with a rose gray at the sides of the backs and cushions. Roomettes have walls and ceilings of orchid gray and upholstery of roseclay. The sleeping cars are carpeted throughout in green.

Three upholstery colors are used in the Vista Domes. In the buffet-lounge coach the seats are in alpine rust and the carpet henna and brown. In the parlor-observation dome car the seats are turquoise and the carpets, rose. In the bedroom-observation-buffet dome car upholstery is sandalwood and the carpet, rose.

Each of the 50-passenger coaches has a dressing room at each end. Two toilet rooms open off the men's dress-

ASSIGNMENT OF THE 34 NEW "ZEPHYR" CARS

	Kansas City-Chicago service	"Black Hawk"	Ben Zephyr"	"California Zephyr"	Total
R.P.O.-baggage	1	..	..	..	1
50-passenger coach	4	..	..	..	4
Dome - coach-buffet-lounge (24 coach seats; 6 lounge; 24 dome seats; 17 coffee-shop seats)	2	..	..	..	2
Dining car (40-48 seats)	2	..	1	..	3
Six-section, six-roomettes, four double bedrooms (26 passengers)	4	2	..	..	6
Six double bedrooms, 10 roomettes (22 berths)	2	4	2	..	8
Sixteen open-section (32 berths)	..	..	1	..	1
Six double bedrooms, five compartments (22 berths)	..	..	..	6*	6
Dome - parlor-observation (27 parlor-car seats; 5 drawing room seats; 24 dome seats)	2	..	..	..	2
Dome - room - buffet-observation (9 berths; 12 buffet and 13 observation seats)	..	..	1	..	1
Total	17	6	5	6	34

*Two of these cars belong to the Western Pacific and one to the Denver & Rio Grande Western.

WEIGHTS (Lb.) OF THE BURLINGTON CARS

	Body, ready to run	Trucks	Total, ready to run
74-ft. R.P.O.-baggage	65,000	39,900	104,900
50-passenger coach	89,800	40,500	130,300
40-48 passenger diner	115,800	40,500	156,300
32-passenger open-section sleeper	100,100	40,500	140,600
6-double-bedroom-5-compartment sleepers	103,100	40,500	143,600
56-passenger dome-parlor-observation	111,800	40,600	152,400
71-passenger dome-coach-buffet-lounge	123,100	40,700	163,800
6-section, 4-double-bedroom, 6-roomette	105,300	40,500	145,800
58-passenger dome-buffet-observation	119,800	40,600	160,400
6-double-bedroom, 10-roomette	105,280	41,500	146,780

ing room, which has a sofa which will seat three. Over the mirrors are glass-enclosed fluorescent fixtures. In the women's dressing room a dressing table and cosmetics shelf run the full length of one side.

In the coach section the windows are 76½ in. wide and the seats are spaced 47 in. between centers. The rotating reversible seats have individual reclining backs. Underneath each seat is a special leg rest which springs up when a lever is pressed. There are also adjustable foot rests which are supported on the back of each seat and controlled by a foot pedal. Each seat is equipped with a built-in ash tray and a spring-clip ticket holder which includes the seat number. The backs and cushions of the seats are foam rubber. General illumination is furnished by seven fluorescent fixtures along the center of the ceiling. Incandescent reading lights over each seat in the underside of the luggage racks are controlled by each passenger.

The 71-passenger Vista Dome-buffet-lounge car has an unusual combination of facilities. Entering the car at the non-vestibule end, the aisle passes between a men's room on one side and lockers on the other to the coffee shop. Here are seats for 17 in two built-in banquette sections and on built-in sofa seats along the sides of the car. The lighting is from fluorescent lamps in cornice fixtures along the sides and across the curtain wall between the two sections of the room.

From the inner end of this room a stairway ascends to the dome. The dome has seats for 24 persons. These are rotating reversible, but the backs are not reclining. There are individual foot rests. Backs and cushions are foam rubber. Windows in the dome are double glazed and the Solex glass is a softly tinted green. The volume of conditioned air circulating in the section depends upon the sunlight striking the dome at any time. Fluorescent light fixtures are placed along the sides of the ceiling at the top of the dome. Incandescent lamps let into the bases of alternate seats illuminate the aisle when the top lighting is turned off.

At the right of the inner end of the coffee shop a passageway leads under the dome. Opening on the passageway is a small lounge with seats for six. This is separated from the passageway by clear glass panels on either side of the entrance and large mirrors are mounted on the transverse walls. Adjoining the lounge is a buffet section from which snacks and beverages are prepared and served.

Beyond the buffet section the passageway leads up into a 24-passenger coach section. At the inner end of this section is a dormitory which occupies space approximately equivalent to two double seats along one side of the aisle. Within this area are a toilet, a folding lavatory and a single tier of three bunks for crew members. The coach section has reclining seats, like those in the 50-passenger coaches, for 24 passengers. Between the coach section and the vestibule are a conductor's space and a women's washroom.

The dome-parlor-observation car has a small parlor section with seats for seven passengers at the front end, with locker and luggage space between it and the vestibule. At the rear end of this section on the bulkhead separating it from the dome is a mural depicting an incident in the early history of the railroad.

Back of this section, opening from the passageway under the dome, is a drawing room with seats for five. Beyond this are men's and women's toilets. Continuing to the rear, the passageway leads up to the parlor-observation section which continues to the end of the car. In this section are seats for 20 in individual movable chairs. From the front of this room leads the stairway to the dome section. At the left side of the stairway, in the corner between it and the under-dome passageway, is a drinking-water cooler. The rear end of this car is not curved, but has observation windows on either side of the end door. It is provided with a diaphragm.

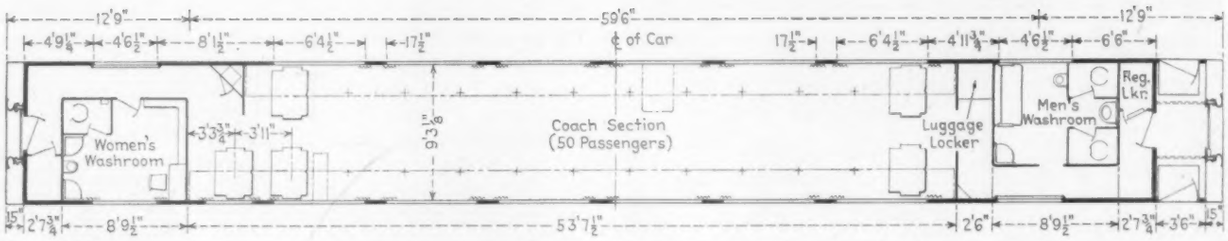
The dining cars, two for the Chicago-Kansas City service and one for the "Ak-Sar-Ben Zephyr" have seats for 48 when all the tables in the main dining section are adjusted to seat four persons each. The dining room is divided into three sections. At each end are a pair of banquettes, each seating four. These are separated from the main dining section by clear glass panels on each side of the aisle. On each panel is etched a vine pattern. The ceiling over the banquette sections is dropped below that in the main section. The dining-room lighting is from continuous fluorescent cornice fixtures along each side of the room.

An outstanding decorative feature of the diner is the horseshoe-shape bar facing the dining room at the kitchen bulkhead. The outer face of the bar is covered with a large carved and painted linoleum mural and the entire wall behind it is a mirror on which is etched an elaborate pattern in antique gold. Antique silver *repoussées* decorate each end of the main dining section above the center aisle.

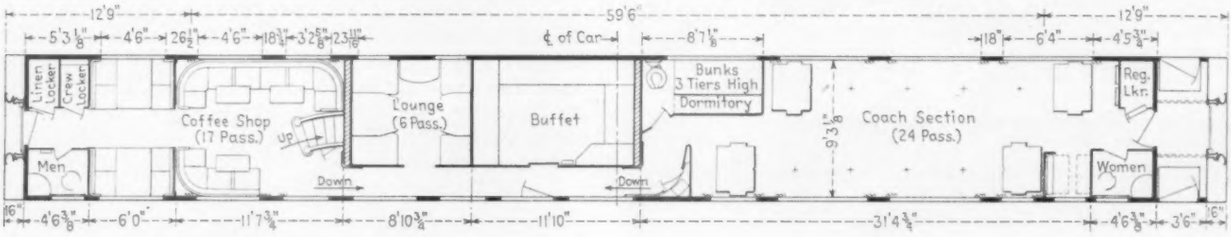
The Sleeping Cars

Four of the sleeping cars for the Chicago-Kansas City and Chicago-St. Joseph service include three types of accommodations each. There are six open sections, with upper and lower berths, six roomettes, and four double bedrooms. The open sections are at the non-vestibule end of the car. Between them and the end of the car are four toilet-rooms, two on each side of the aisle.

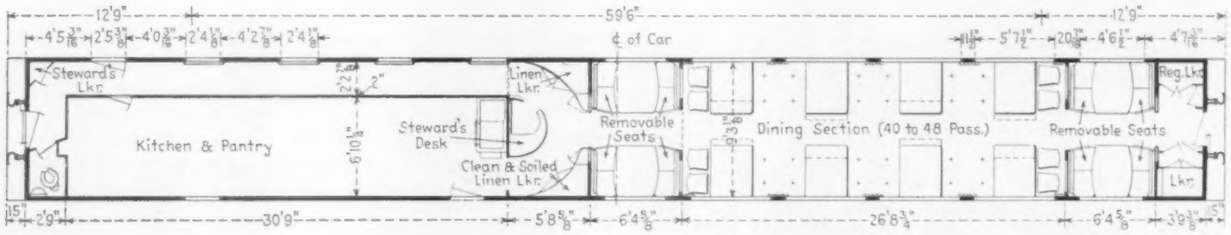
In the roomettes the berths can be lowered at any time by the occupant without having to move from the room



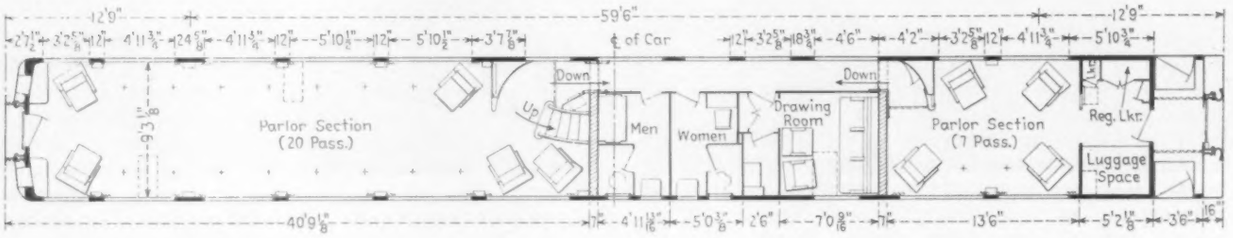
The 50-passenger coach.



The dome-coach-coffee-shop-lounge car.



The dining car.



The dome-parlor-observation car.

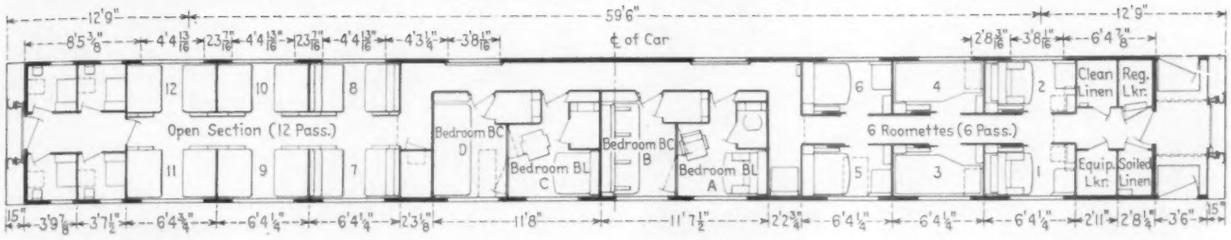
or use the curtains. This is accomplished by narrowing the foot of the berth and by relocating the toilet. A large mirror on the forward wall provides an illusion of spaciousness. There is also a full-length mirror on the inside of the roomette door. A large fluorescent fixture in the middle of the ceiling furnishes general illumination. Incandescent fixtures provide reading light.

The car is fitted with a circulating ice-water system. All controls for light, heating, and air conditioning are mounted on a simple panel which can be reached from a sitting position by day or from the berth at night. Etched steel instruction plates have replaced decalcomanias, simplifying repainting and insuring good legibility.

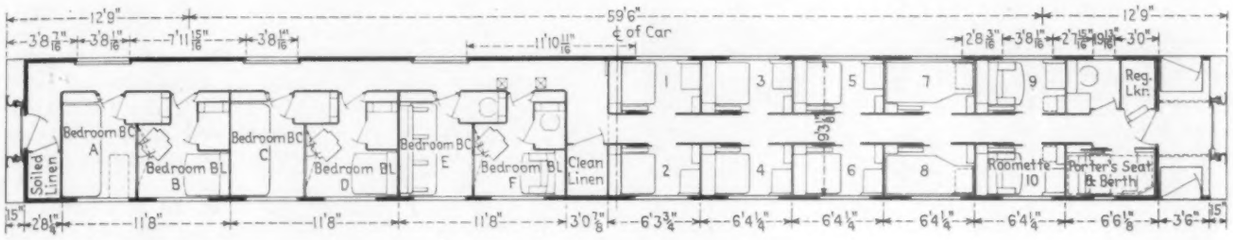
There are four double bedrooms in this car. Two of these are of the transverse type and the others of the longitudinal type. Folding partitions permit a transverse and a longitudinal room to be made en suite as a single large room when desired. Each room has completely enclosed toilet facilities. A door in the folding partition permits communication between rooms, if desired, without removing the partition. Lighting and the arrangement of controls in these rooms are similar to those in the roomettes.

Aside from the four cars of this type assigned to the new Chicago-Kansas City and Chicago-St. Joseph service, there are two for use on the "Black Hawk."

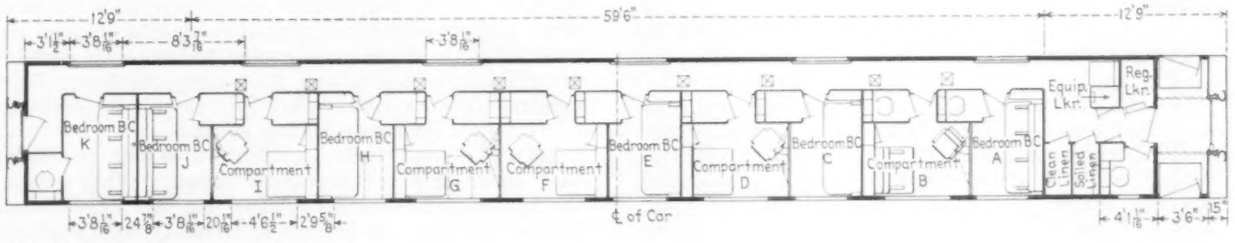
The six-double-bedroom, 10-roomette cars provide accommodations like those in the car just described. At the vestibule end, adjoining the roomettes, are a porter's seat and berth station and a toilet opposite. Two of these cars are assigned to the Chicago-Kansas City service,



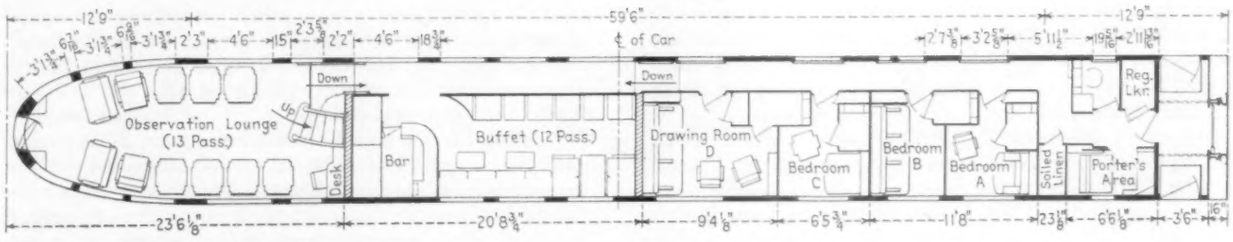
The section-bedroom-roomette car.



The bedroom-roomette car.



The bedroom-compartment car.



The dome-bedroom-buffet-observation car.

four to the "Black Hawk," and two to the "Ak-Sar-Ben Zephyr."

One 16-section sleeping car and one dome-bedroom-buffet-observation car were procured by the Burlington for the "Ak-Sar-Ben Zephyr." The open-section sleeper has no room accommodations. It has the customary dressing rooms at the ends. Two separate toilets open from the men's room.

The dome-bedroom-buffet-observation car differs from the other observation cars in that it has an oval rear end. At the front end there is a porter's seat and berth and a general toilet. Back of these are three double bedrooms and a drawing room. Two of the bedrooms are longitudinal and one is transverse. The transverse bedroom and one of the others are separated by a folding partition and can be converted into a large room.

The entire length of the space under the dome is occupied by a buffet lounge with seats for 12 and a bar at the rear end. The front and side of this room are decorated with a mural painting which extends along the outside wall of the car under the high windows.

Beyond the dome section is an observation lounge. Here are chairs for nine persons and, facing the rear, two built-in settees each with seats for two. From the front of this section is the stairway to the dome section. Against the partition at the right of the stairway is a writing desk and magazine rack. On the left of the stairway, in the angle between it and the entrance to the under-dome passageway, is a water cooler. There are seats for 24 passengers in the dome.

Six sleeping cars, each with six double bedrooms and five compartments—three for the Burlington, two for

The buffet under the dome in the dome-bedroom-buffet-lounge car.

the Western Pacific and one for the Denver & Rio Grande Western—were built for "California Zephyr" service. The rooms are arranged so that three sets of alternate bedrooms and one compartment and one pair of compartments are separated by folding partitions and can be combined into large rooms.

Structural Features

The cars are all of Budd modified-girder stainless-steel construction except the Vista Dome cars which are modified truss type construction. The railway-post-office-baggage car is 73 ft. 10 in. long, coupled. All passenger-carrying cars are 85 ft. long. The width is 9 ft. 10⅜ in. outside. From the rail to the top of the roof is 15 ft. 9⅜ in. for the dome cars and 13 ft. 6¼ in. for the others. Weights are shown in a table.

The passenger-carrying cars are insulated throughout with 3 in. of Ultra-lite fiber-glass in roofs, end and side walls, and floors. End doors and side service doors are insulated, as are also kitchen, pantry and buffet partitions. Sound-deadening material is sprayed on the inside of sides, ends, floors and roofs, and compressed insulation enclosed by steel sheets, forming in effect a double floor, is applied over trucks of passenger-carrying cars, except at the kitchen end of the diners.

Interior finish of the passenger-carrying cars, including walls and ceilings, is largely sheet aluminum. Exceptions are the passageway walls from coach section to end doors, walls and ceilings in the kitchen, pantry, buffet and bars, which are stainless steel, and certain locations in the dome-coach-buffet-lounge car and the dome-parlor-observation car, where metal-faced plywood is used. In general, partitions not involved in the load-carrying structure of the car are either plywood, faced on both sides with bonderized zinc-coated carbon steel, or rectangular steel tubing faced with metal on both sides.

The floors of the passenger-carrying cars are Penta-treated plywood which is applied directly to the top flanges of the stainless-steel subfloor, but separated from the metal by sound-deadening material.

Windows in the bodies of the passenger-carrying cars are Adams & Westlake double-glazed breather type. Those in the coaches and dining cars are unusually wide. In the coaches the sashes are 76½ in. wide. Passengers in two double seats sit alongside each window and a center guide for the venetian blinds is installed so that there is a separate blind alongside each seat. In the main dining section the windows are 67½ in wide.

Side windows in passenger sections are glazed with ¼-in. Solex tempered glass on the outside and ¼-in. clear laminated glass on the inside. Dome sashes are also double-glazed. The outside glass is Solex, tempered; inside, laminated Solex, non-tempered.

Air Conditioning

All cars, except the R.P.O.-baggage car, are fitted with Frigidaire electromechanical air-conditioning equipment with Trane full-flooded condensers. Compressors are driven by two-speed motors. Evaporators are in two sections, except that blowers which supply the domes are arranged for two speeds and operate with a single evaporator coil.

The capacity of the units in all non-dome sleeping cars is seven tons with a total air circulation of 1,600 cu. ft. per min., of which half is fresh air. The 50-passenger coach has an 8-ton unit and a maximum air circulation of 2,400 cu. ft. per min., of which one quarter is fresh air.

The unit in the dining car is of 10 tons' capacity and handles a total of 2,800 cu. ft. per min.—1,800 cu. ft. per min. through the dining room and 1,000 cu. ft. per min. through the kitchen, each in a separate system. The dining-room system delivers air, of which 500 cu. ft. per min. is fresh and 1,300 is recirculated, to the dining room and passageway. The kitchen system delivers all fresh air to the kitchen and pantry and to an air curtain around the opening between the pantry and foyer. This induces air motion from the foyer to prevent cooking odors from entering the dining room.

The three dome cars are each provided with two separate units, each of six tons' capacity. One serves the normal and lower floor levels; the other, the dome. Part of the air to the dome is delivered through Anemostats in the ceiling over the aisle. These direct the air toward the passengers seated next to the aisle. The remainder of the air is delivered from slots along the sides of the ceiling in a layer which flows down alongside of the windows. A heat-sensitive thermostat in the dome cars automatically reduces the amount of cooling in the dome section when the sun load goes off.

All fresh-air intakes, except at the kitchen end of the dining car, include Farr viscous filters, Dorex odor absorbers, and Electro-Airmat units composed of an ionizer and Airmat filter. Return air passes through ceiling grills into a plenum chamber housing the evaporator where it mixes with the fresh air. A blower pulls the mixed air through the Electro-Airmat unit and forces the air through the evaporator unit into an overhead duct from which it is distributed.

Baffle Air panels are employed in the main coach, the main dining section of the diner, and in the aisle between open sleeping-car sections. Anemostats are installed in all sleeping rooms, in the various lower-floor sections of the dome cars, in the kitchen and pantry of the diners, and in wash-rooms and passageways. They also share the distribution in the domes with slotted diffusers at the sides of the ceiling duct.

The passenger-carrying cars have the Vapor zone-control heating system. This includes the floor system of aluminum finned radiation and overhead heating coils which are a part of the air-conditioning evaporator units. The overhead heat circuits are operated from thermostatically controlled valves above the ceiling. These are equipped for manual remote control in emergency.

In the sleeping cars the main control panel permits manual changeover from heating to cooling. On other cars the changeover is automatic.

A dome-parlor-observation car.

The electrical system on these cars is 32-volt d.c. Power is supplied by Safety genemotors and Spicer drives, except on the mail-baggage car. This has a 5-kw. generator driven by V-belts. All other cars, except the diners and dome-bedroom-buffet-observation car, have 25-kw. d.c. generators with 32-hp., 220-volt, 3 phase a.c. induction motors. On these cars the generator capacity is 30 kw. Batteries on the passenger cars are Exide EPTB-45 of 1,294 amp-hr. capacity. Two of these batteries are installed on the dining car. The railway-post-office-baggage car has an EPTA-25 battery of 500 amp.-hr. capacity. Motor alternators with a capacity of 2 kw., generating 60-cycle single-phase current at 110 volts, are installed on all passenger cars. The diner, the 50-passenger coach and the six-double-bedroom, five compartment sleeping car each has one unit; the others two.

Except for the dome-coach-buffet-lounge cars, only those intended for operation in the "California Zephyr" are equipped with radio and public-address systems. The latter cars have essentially the same equipment as is now on the cars originally built for the "California Zephyr" service. On the dome-coach-buffet-lounge car the receiver is mounted in a locker in the enclosed buffet. Speakers are placed in the coffee shop, the small lounge and in the dome. There is no speaker in the coach section. The dome speaker can be turned on or off at the receiver.

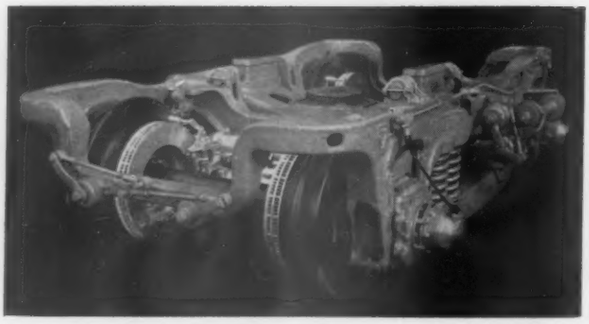
The trucks for all cars are General Steel Castings four-wheel type with 6-in. by 11-in. journals and Timken roller bearings. The wheel base is 8 ft. 6 in. The trucks have swing hangers, coil bolster springs and longitudinal anchor rods. They are fitted with roll stabilizers and have two shock absorbers each to dampen vertical motion and lateral motion of the bolster. Each truck of the diner, the dome-bedroom-buffet-observation car and the dome-parlor-observation car is also equipped with two end transom shock absorbers.

The air brakes on all cars are the Westinghouse H.S.C. type with D-22-BR control valves and electropneumatic straight-air control. Each axle is equipped with the Rolokron anti-wheel-slide device. New York Air Brake pneumatically operated unidirectional sanding equipment operates on both wheels of the leading axle of the leading truck on each car. The operation is controlled by the Rolokron and each operation is limited to 20 sec. Budd disc brakes are applied on all trucks.

The cars have Waugh WM-6-DP double-acting rubber draft gears and tight-lock couplers.

PARTIAL LIST OF MATERIALS AND EQUIPMENT ON THE NEW "ZEPHYR" CARS

End underframe units	Youngstown Steel Car Corp., Niles, Ohio
Stop lug castings, end-sill castings and coupler carrier supports	Pennsylvania Electric Steel Castings Co., Hamburg, Pa.
Body center plates	National Malleable & Steel Castings Co., Cleveland
Truck frames, bolster center plates and roll stabilizers	General Steel Castings Co., Granite City, Ill.
Sound deadening (trucks)	United States Rubber Co., New York
Wheels and axles	Standard Steel Works Div., Baldwin-Lima-Hamilton Corp., Burnham, Pa.
Journal bearings and boxes	Timken Roller Bearing Co., Canton, Ohio
Equalizer beams	Canton Drop Forging & Mfg. Co., Canton, Ohio
Swing hanger pins (Rol-man)	Manganese Steel Forge Co., Philadelphia
Bushings	Ex-Cell-O Corp., Detroit
Shock absorbers	Houdaille-Hershey Corp., Houde Engineering Div., Buffalo
Truck center pins	W. H. Miner, Inc., Chicago
Air-brake equipment, hose and couplers; filler valves; water-raising equipment	Westinghouse Air Brake Co., Wilmerding, Pa.
Air-brake and steam-line piping	A. M. Byers Co., Pittsburgh
Anti-wheel-slide devices, truck brakes, brake shoes and keys	Budd Co., Philadelphia
Sanding equipment	New York Air Brake Co., New York
Hand brakes	National Brake Co., New York
Coupler and uncoupling mechanism, draft-gear yoke, body center plate	National Malleable & Steel Castings Co., Cleveland
Draft gear	Waugh Equipment Co., New York
Blind rivets for attaching side panels	Cherry Rivet Co., Los Angeles
Flooring	Alan Wood Steel Co., Conshohocken, Pa.
Vestibule diaphragms:	
Inner, canvas	Morton Mfg. Co., Chicago
Outer, rubber	B. F. Goodrich Co., Akron, Ohio
Vestibule curtains	Morton Mfg. Co., Chicago
Face plate side stem guides	Pennsylvania Electric Steel Castings Co., Hamburg, Pa.
Passenger-car step mechanism	O. M. Edwards Co., Syracuse, N. Y.
Weatherstripping (exterior doors)	Harnley Weatherstrip Co., Chicago
Insulation—roof, sides, ends, floor	Gustin-Bacon Mfg. Co., Kansas City
Sound-deadening	J. W. Mortell Co., Kankakee, Ill.
Insulation — steam train-line and steam piping	Johns-Manville Co., New York
Windows (including dome)—double-glazed breather type	Adams & Westlake Co., Elkhart, Ind.
Window glass:	
Inside	Libbey-Owens-Ford Glass Co., Toledo
Outside	Pittsburgh Plate Glass Co., Pittsburgh
Outside prism	Pressed Prism Plate Glass Co., Morgantown, W. Va.
Door operators	National Pneumatic Co., Boston
Interior doors and partitions	Met-L-Wood Corp., Chicago



All trucks are equipped with Budd disc brakes and the Rolokron anti-slide device.

Vestibule carpet	Shelton-Looms, New York
Carpet pad	U. S. Rubber Co., New York
Linoleum	Armstrong Cork Co., Lancaster, Pa.
Rubber tile	Goodyear Tire & Rubber Co., Dayton, Ohio
Window shades:	
Mechanism	Adams & Westlake Co., Elkhart, Ind.
Material	Pantasote Co., New York
Venetian blinds	Ajax-Consolidated Co., Chicago
Draperies	Goodall Fabrics, Inc., New York
Coach seats, dome coach seats, foot rests	American Seating Co., Grand Rapids, Mich.
Seats—parlor and lounge car; washroom settees	Coach & Car Equipment Co., Chicago
Vanity chair; folding chairs	Dwight Austin Products Co., Kent, Ohio
Dining chairs	General Fireproofing Co., Youngstown, Ohio
Seat coverings:	
Mohair	Goodall Fabrics, Inc., New York
Leather	Eagle-Ottawa Leather Co., Grand Haven, Mich.
Formica	Formica Insulating Co., Cincinnati
Ash stands	Marshall Field & Co., Chicago
Ash receptacles in wall	Dayton Manufacturing Co., Chicago
Paints; Herculite glass panels	Pittsburgh Plate Glass Co., Pittsburgh
Kitchen and pantry equipment	Angelo Colonna, Philadelphia
Refrigeration	Frigidaire Div., General Motors Corp., Dayton, Ohio
Gas rangers and broilers	Stearnes Co., Chicago
Propane fuel cabinets	Waukesha Motor Co., Waukesha, Wis.
Propane fuel tanks	Pressed Steel Tank Co., Milwaukee
Air-conditioning system:	
Evaporators; compressors	Frigidaire Div., General Motors Corp., Dayton, Ohio
Condensers	Trane Co., La Crosse, Wis.
Heating system and control panel; steam end valves, connectors and couplers; water heaters	Vapor Heating Corp., Chicago
Fuel heating equipment	Waukesha Motor Co., Waukesha, Wis.
Fresh-air filters and recirculated air filters	Farr Co., Los Angeles
Air distributors:	
Aspirating type	Anemostat Corp. of America, New York
Baffle-Air	Equipment Research Corp., Chicago
Recirculated air grills; door grills	Barber-Colman Co., Rockford, Ill.
Electrostatic air filters	American Air Filter Co., Louisville, Ky.
Odor absorbers	Tuco Products Corp., New York
Fire extinguishers	C-O-Two Fire Equipment Co., Newark, N. J. Pyrene Manufacturing Co., Newark, N. J.
Water coolers:	
Electromechanical	Marquette Railway Supply Co., Chicago
Circulating	E. A. Lundy Co., New York
Drinking-cup dispensers	Dixie Cup Co., Easton, Pa.
Generator drive:	
Passenger cars	Spicer Mfg. Div., Dana Corp., Toledo
Head-end car	Dayton Rubber Co., Dayton, Ohio
Batteries	Electric Storage Battery Co., Philadelphia
Lamp regulators; motor alternators; genemotors; generator	Safety Car Heating & Lighting Co., New Haven, Conn.
Wire and cable	Okonite Co., Passaic, N. J.
Battery train-line jumper and receptacles	Loeffelholz Co., Milwaukee
Air-brake train-line jumper and receptacles; standby receptacles; battery-charging receptacles	Pyle-National Co., Chicago
Conduit fittings	Appleton Electric Co., Chicago
Light fixtures	Luminator, Inc., Chicago Safety Car Heating & Lighting Co., New Haven, Conn.
Signal lights	Mars Signal Light Co., Chicago
Folding lavatories	Ozone Metal Products Co., Ozone Park, N.Y.
Hoppers	Crane Co., Chicago Duner Co., Chicago
Hoppers, folding type	Youngstown Welding & Engineering Co., Youngstown, Ohio
Lavatories; dental basins	Crane Co., Chicago
Railway mail service fittings	American Car & Foundry Co., New York
Candle lamps and brackets for mail cars	Adams & Westlake Co., Elkhart, Ind.

How Hot Boxes Can Stop Trains Automatically

Device tested in A.A.R. laboratory causes train brakes to apply when a journal reaches a dangerous temperature

A method of stopping a train automatically in the event of development of a hot box was demonstrated at the Association of American Railroads test laboratory in Chicago on January 16. The device, developed and patented by A. J. Herbert of the Southern Pacific, (P. O. Box 363, Lafayette, La.) is tied into the brake pipe and functions to bring the train to a stop whenever the bearing temperature exceeds 400 deg. F.

Detection of the overheated journal is by a fuse with a melting point of 160 deg. F. This is placed in the journal box between the journal and the lid. The 160-deg. setting was arrived at through experimentation as the temperature which is reached at the fuse location when journal temperature is 400 deg. F.

The fuse, shaped as shown in Fig. 3, squeezes together a pair of bell cranks on the bottom of the tee in Fig. 2 when the coupling nut is tightened. In squeezing one leg of each bell crank toward the center of the opening, the fuse holds a valve tight against a seat in the bottom stem of the tee. When the journal temperature reaches 400 deg., the air surrounding the fuse is at 160 deg., causing the fuse to melt. This relaxes the grip on the bell cranks, allowing the valve to open.

When the valve opens, air flows through the ¼-in. piping and the tee from left to right by a connection to the train line from this piping on the left. This flow of air in the small piping lifts a spring-loaded valve in the main release chamber (which extends below the large elbow shown at the lower left corner of Figs. 1 and 2). Lifting the spring-loaded valve off its seat discharges air in the brake pipe to the atmosphere through the holes in the bottom of the release chamber, and the brake-pipe reduc-

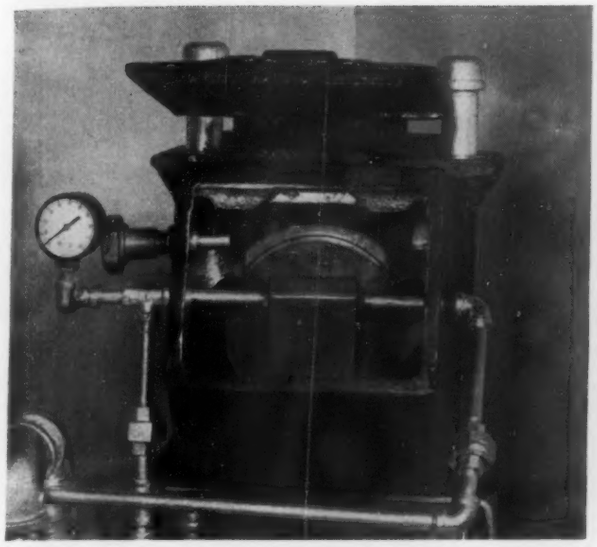


Fig. 1—Safety device for stopping a train with a hot box, shown rigged up for testing, does not interfere with packing or changing brasses.

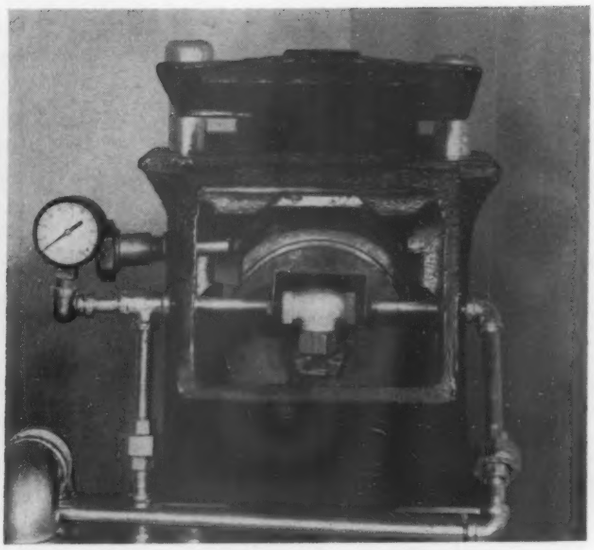


Fig. 2—Replacing the thermal fuse which operates the safety device requires only raising the hinged cover, loosening the coupling nut and inserting a new fuse.

tion results in a brake application in the usual manner.

The type of application can be varied from light service to full emergency by choice of the valve spring. A stiff spring will cause only a light application because it will close the valve against the pressure remaining in the brake pipe after only a slight brake-pipe reduction has occurred. A lighter-scale spring, on the other hand, will permit the brake-pipe pressure to reduce to near zero before the spring will seat the valve and thereby shut off the flow of brake-pipe air to the atmosphere. So that full emergency can be attained with a light spring, the total area of the five holes in the main release chamber is equal to the cross section area of the brake pipe, thus offering no restriction to the quick "dumping" of the air.

Provision is made for by-passing this device after it has functioned so that, at the discretion of the crew, the affected train can be moved from where it stops to the nearest siding to avoid obstructing the main line. Detection of the car on which the hot box has occurred is through the loud hissing sound made by the air escaping from the release chamber.

Replacing the thermal fuse takes but a minute. The nut on the bottom of the tee in the box is loosened, which permits the vertical legs of the bell cranks to come together. Tightening the nut with the new fuse in place again seats the control valve, and the device is ready for the road.

Location of the device is high enough to avoid interfering with repacking or adjusting the waste yet low enough to permit brasses and wedges to be replaced in the conventional manner. It is placed near the outside of the box so that it does not interfere with normal lateral movement of the axle.

During road operation the tee in the journal box is protected by a 1/16-in. hinged cap which is spring loaded to keep it in place as shown in Fig. 1. The cap is raised to the position shown in Fig. 2 when it is necessary to renew the thermal fuse. This type of fuse is reinforced along the center section by a steel rod to prevent it from breaking from impact and vibration, and thereby causing a false warning and unnecessary stop.

The cover also serves a second purpose. It acts as a reflector for the heat radiated to the thermal fuse. On tests conducted without the cover, the brass temperature which caused the fuse to melt would vary with the temperature of the air surrounding the box. With the cover in place, test data indicates that the surrounding air will have no effect on the brass and fuse-melting temperatures.

Independent of Outside Temperature

The series of tests which indicate independence from outdoor temperature was conducted by inserting a 1,300-watt heating element in the end of the journal under four different outside temperature conditions and noting the time required to melt the fuse. The four temperature conditions were: (1) 101 deg. in the sun; (2) 70 deg. in the shade; (3) 70 deg. indoors; and (4) 14 deg. below zero in a food locker. In each case, 37 minutes were required for the 1,300-watt heating element to cause the fuse to melt (160-deg. temperature). Thus, while the heat source was an electric element rather than a hot journal, the indication is that ambient temperature will not affect the conditions under which the fuse will melt as a given heat source melted the fuse in equal times under radically different temperature conditions.

Present plans call for road testing of this hot-box detection device in the near future and the submission of the results of the tests to the A.A.R. for that organization's further study.

Fig. 3—The fuse is reinforced by a steel rod to prevent it breaking from vibration or impact. Small piping is made of malleable iron or steel for the same reason.

The railroads' quest for more freedom to deal with managerial questions, says the commission, should be subjected to "searching analysis."

I.C.C. Sees No Undue Delay In Its General Rate Decisions

Calls upon railroads to settle fate of Railway Express Agency, and to avoid "questionable" traffic-getting practices

Arguments in rebuttal of charges to the effect that its decisions in general railroad rate cases have been unduly delayed were included by the Interstate Commerce Commission in its sixty-sixth annual report. The arguments also served to register again the commission's opposition to railroad-sponsored legislation that would authorize carriers to make general rate increases upon 30 days' notice, accompanied by carrier certifications of need for the revenues.

The report, which went to Congress January 30, was in the usual form, being a 148-page document covering commission activities from November 1, 1951, to October 31, 1952. It contained 18 legislative recommendations, most of them repeaters of proposals previously made by the commission in earlier annual reports or other presentations to Congress.

The report also called upon the railroads to make known what will be the fate of the Railway Express Agency when the present express contract expires in February 1954. And it expressed the commission's concern about "questionable practices of carrier management," such as "unwarranted expenditures of large sums of money in maintaining places to entertain and in entertaining traffic managers," and the payment of "excessive fees" to directors "who apparently have little to contribute to management but much to add to a carrier's traffic, or to a particular balance of power between groups of stockholders competing for corporate control."

Meanwhile, the commission assured Congress that it had "continued to improve" its own management during the year. As the report put it in one place, the commission "has always been keenly aware of its responsibility to the public for efficiently carrying out its substantive operations, and for spending public funds in the most economical manner."

The report's discussion of the "time lag in rate-increase cases" included a timetable showing the application and decision dates of the several postwar proceedings. Counting interim as well as final increases, the commission read the figures as showing that "two increases were authorized in 1946, two in 1947, three in 1948, one in 1949, two in 1951, and one in 1952."

"Considering the magnitude of these proceedings, the substantial sums involved and the fact that they affect the interests of shippers of practically every commodity moving by rail throughout the country, it is apparent from this table that much time is necessarily consumed," the report said.

Earlier in the discussion, the commission referred to the "fast-increase" legislation advocated by the railroads. The bill introduced in the Senate last year, the report said, would have given the railroads "a free hand in establishing general increases," permitting them "to be the judges as to how large an increase they needed."

As to the fate of the Express Agency, the commission noted the recent improvement in express business, saying that increases in parcel post rates appear to have afforded REA "an opportunity to rehabilitate its traffic." The report then added:

"There is a serious responsibility resting on the railroads to inform the shipping public and the officers and employees of the Railway Express Agency at an early moment as to the intentions of the contracting railroads with respect to their continuing the express business in its present or some other form; and to take prompt steps to protect the users of express service against any unwarranted service disruptions resulting from any changes that may be contemplated in the express contract which will expire in February 1954. We urge the railroads to give immediate attention to this vexing problem."

In its discussion of "questionable practices of carrier management," the commission said that practices which violate the Interstate Commerce Act are "relatively rare considering the size of the transportation industry." It has found "more troublesome" the problems of "departures from accepted business ethics," which "are not always illegal in themselves. . . ."

In addition to "unwarranted expenditures" for entertainment and "excessive fees" for directors, the commission gave another example of the practices it had in mind. It was "the use of noncarrier affiliates to serve carrier purposes by indirection." The problem here, the report added, "is not the prevention of the use of an affiliate as such," but "to detect, and if possible prevent, an improper use of such a device without undue interference with efficient and proper intercompany relations."

Still Wants Per Diem Rate as Expediter

First of the report's 18 legislative recommendations was a proposal that Section 1(15) be amended to give the commission emergency powers over equipment rentals, thus permitting it to use the per diem rate as a device to promote expedited movement of freight cars. A 1947 commission order which undertook to assert such powers was set aside by the courts.

Recommendation No. 2 proposed that Section 15(13) be amended to prohibit the payment of allowances to shippers for performing their own spotting services, except by and with commission approval in each individual instance. "Adoption of such an amendment," the report argued, "would accomplish two very desirable purposes. First, provide notice to rail carriers of legislative disapproval of preferential practices and waste of operating revenues involved in the unequal grant of allowances. . . . Second, save much of the expense to the government involved in commission compulsory proceedings required for application of Ex Parte 104 principles . . . because of continued failure of carriers to accept and voluntarily apply such principles."

The third recommendation was that Section 20(6) be amended to make it applicable to "persons" who furnish locomotives to railroads. The section, which authorizes the commission to inspect accounts and records, now applies only to "persons" furnishing cars or protective services.

The fourth recommendation was that Section 20a(2) (which requires commission approval of security issues) be broadened to embrace "any contract for the purchase or lease of equipment not to be fully performed within one year from the date of the contract."

Truman Vetoed This One

Recommendation No. 5 revived a commission proposal which Congress adopted in 1947 only to have it vetoed by former President Truman. As set out in the present report, the recommendation was that Section 20a(12) be amended "to permit more extensive use of competitive bidding in the marketing of securities."

Section 20a(12) now prohibits any officer or director of a carrier from profiting from security sales by such carrier. Presumably the liberalization now contemplated by the commission would be like that embodied in the vetoed 1947 bill, i.e., a provision stipulating that the prohibition would not apply in cases where carrier securities were sold on the basis of competitive bidding.

Recommendation No. 6 proposed that Section 20b (the so-called Mahaffie Act), which provides for voluntary financial reorganizations of railroads, be amended to permit controlled or controlling stockholders of an involved railroad to vote on its revamp plan—"subject to the power of the commission" to increase the prescribed percentage [75 per cent] of assents required in such cases for approval of a proposed plan. Under the present law a security is not deemed to be outstanding for the purpose of voting if the commission determines that the assent of the holder of such security is within control of the carrier proposing the reorganization, or of any person or persons controlling the carrier. Previous commission reports which made this recommendation have argued that the present law "may result in the failure of meritorious plans through the refusal of a small minority of stockholders to assent, or register any vote."

The present report's Recommendation No. 6 also embodied calls for two other Section 20b amendments which were appraised as "minor." One of them would make more general, and thus more flexible, the commission's control over the solicitation of assents in voluntary reorganization proceedings, and the other would direct the commission to classify the affected securities "into such classes as it shall determine to be just and reasonable." In the latter connection, the report explained that the classification of securities became an "important issue" in the Boston & Maine case.

Recommendation No. 7 proposed that Section 22 be amended to preclude the filing by the government of complaints assailing rates granted by carriers to government agencies pursuant to provisions of that section.

Still Wants "Radio-Rules" Bill

Recommendation No. 8 was another call for enactment of legislation like that embodied in so-called radio-rules bills which have failed of enactment in recent sessions of Congress. The proposed legislation would amend Section 25 [which now contains provisions of the so-called Signal Inspection Act] to give the commission authority over installations of radio and other train-communication systems. The commission recalled that it had been recommending such legislation "for the past six years."

Recommendation No. 9 proposed addition to the act's Part III of a new section (312a) containing provisions

for revocations of water carrier certificates or permits. Amendments to Part IV, which applies to freight forwarders, were proposed in the next four recommendations. They would determine the exemption for forwarders of used household goods; give the commission authority to revoke the exemption of any shipper association which did not qualify as "bona fide"; require certificates of convenience and necessity as a prerequisite to entering the forwarder business; and extend the commission's regulatory authority to consolidations, mergers, and acquisitions of control of freight forwarders. As to the latter recommendation, the commission said:

"The present lack of such authority permits complete freedom of common control of competing forwarders through acquisitions of their stocks. There has come to our attention a situation in which a single common control exists over eight forwarders through a holding company."

Recommendation No. 14 proposed to add to the act provisions which would make motor carriers, water carriers, and forwarders, liable [as the railroads now are] for the payment of damages in reparation awards to persons injured by them through violations of the act.

Recommendation No. 15 called for a grant to the commission of the same emergency powers with respect to motor carriers and water carriers that it now has with respect to railroad car service.

The report's remaining three recommendations called for changes in acts other than the Interstate Commerce Act. The first of them, No. 16, proposed that the Standard Time Act be amended to provide for full occupancy by the federal government of the legislative field respecting standards of time to be observed throughout the country. Recommendation No. 17 proposed that the Administrative Procedures Act be amended to validate commission determinations and proceedings in motor-carrier cases which have been clouded by questions of compliance with that act's hearing-examiner provisions. Recommendation No. 18 proposed that the Transportation of Explosives Act be amended "to include specifically radioactive materials and to make contract carriers and private carriers engaged in interstate and foreign commerce subject to its provisions."

On "More Freedom" for Railroads

The report, as usual, got under way with the commission's general discussion of "transportation during the year." This included comment on "interagency competition," where the commission reported that, during the year under review, there had been "continued and apparently more concerted discussion in railroad quarters of the desirability of giving railroads more freedom in dealing with what they designate as managerial questions, particularly in the adjustment of rates and in the use of motor transport facilities."

"It is obvious," the report added, "that a substantial change in congressional policy . . . is presented by this type of proposal, and that a more searching analysis of the possible advantages and disadvantages, and of the implications of such a change, must be made than any which has thus far come to our attention."

In its discussion of private carriers, the commission said that "some shippers with trucking concerns of their own challenge the for-hire carriers to make private transportation unattractive and unnecessary." That situation "is a more or less fluid one," the report added. It went on to say that the commission's waybill studies "apparently" provide data "useful for one type of approach" to the problem of determining results of competitive rate reductions.

On the matter of "operating efficiency," the commission expressed the view that "further efforts to bring about substantially complete elimination of the hot-box problem would go far to reduce costs, improve safety and reliability of service, and simplify operations." Meanwhile, it had referred to dieselization as a contribution to efficiency "which will be difficult to match in the immediate future with any other single advance in railroad technology."

The report's review of traffic and earnings of transportation agencies showed that carriers under commission jurisdiction reported, for the 12 months ended June 30, 1952, gross revenues of $16,918,827,000, of which the railroads accounted for $10,860,490,000. Revenues of private car lines and freight forwarders are not included in the total, but the report said that the former had revenues of $192,794,167 for the same 12 months, while the gross of the freight forwarders was $85,954,505.

Now Need 13,000 Cars Per Month

More than 11 pages of the report were devoted to a review of the Defense Transport Administration's work and commission activities in connection therewith. The review's discussion of the freight-car program said that production of 13,000 new cars per month is now required to achieve the July 1, 1954, goal.

In its discussion of the "passenger-train deficit," the commission said that its November 1951 decision in the mail-pay case had put mail revenues on a basis "approximately equal to the operating expenses, rents, and taxes apportioned to that service." The commission then went on to refer to the deficit from express operations, and to say again that it was "not advised whether the rail carriers intend to continue to underwrite the express business."

As to the transportation of passengers, the commission observed that this business still involves "much less than capacity utilization . . . of the cars." Curtailment of "unprofitable train operations of a local nature" was suggested as "one of the means of reducing the passenger deficit." The commission then noted its limited power in this field, and added:

"It would appear that, as long as the federal law stands as it is, if anything substantial along this line is to be accomplished, the state commissions must do it by cooperative action among themselves."

In a subsequent discussion of the small-shipments problem, the commission called that problem "most troublesome and difficult." It referred to operations of forwarders, but said that method "does not go to the root of the difficulties connected with the relatively high cost of terminal handling." The solution of the problem "is not easy to find," the report added.

"The ultimate solution," it continued, "may, in fact, depend upon a better standardization and more streamlining of the basic transportation services. The fact that the contract between the express company and railroads will expire in February 1954 may influence events with respect to the transportation of small shipments."

In its account of "management improvement within the commission," the report listed 25 "typical examples" of "improvement undertakings" by the commission during the year under review. Like its predecessor, the report also included a discussion of the effect of reduced appropriations on the work of the commission. The previous report had pointed up that problem with a comprehensive presentation designed to show that appropriation cuts were bringing about "deregulation" of transport agencies under commission jurisdiction.

SUPPLY TRADE

(Continued from page 18)

Edward J. England, formerly general manager of the Chicago Freight Car & Parts Co., who has been promoted to vice-president in charge of operations. He will continue to supervise operations of the company's Chicago, Pueblo, Colo., and Auburn, Wash., shops, in addition to being responsible for all purchasing functions.

Thomas J. Maines, of the **T-Z Railway Equipment Company,** has been appointed sales representative for the Pittsburgh area.

C. T. Donovan has been appointed sales manager of the La Grange factory branch of the **Electro-Motive Division** of **General Motors Corporation. A. W. Cryer** has been named branch representative.

Gerald F. Prange, formerly of the Washington, D.C., laboratory of the Timber Engineering Company, has joined the technical department staff of the **National Lumber Manufacturers Association,** at Washington.

George J. Fischer (left), formerly general sales manager of the Aeroquip Corporation, has been elected vice-president, sales, and Matthew J. Bentley (right), formerly works manager, has been elected vice-president, manufacturing. Mr. Fischer was with the B. F. Goodrich Company before joining Aeroquip. Mr. Bentley was with Electric Sprayit Corporation.

Blake C. Howard, Jr., who has joined the maintenance chemicals department of the Pennsylvania Salt Manufacturing Company, to handle sales in the St. Louis territory. Mr. Howard formerly was with the Equipment Sales Corporation.

George L. Green, former executive vice-president of sales for the **Spring Packing Corporation,** has joined the **Pullman-Standard Car Manufacturing Company** as a sales vice-president.

D. E. Barton, mechanical engineer—products, of the **Chicago Railway Equipment Company,** has been promoted to plant manager in charge of manufacturing at Chicago and Franklin, Pa., plants. **John Holden,** former mechanical engineer of the Missouri-Kansas-Texas, has been appointed assistant chief mechanical engineer.

Barth Gilcrist (left), has been appointed division manager at Philadelphia for the Gustin-Bacon Manufacturing Company, and Leonard E. Feitt (right), who was formerly resident salesman in Pittsburgh, has been appointed to the position of assistant to division manager.

C. E. Grigsby, vice-president of American Steel Foundries, who has been assigned to direct sales of the company's new Transportation Equipment division, as *Railway Age* announced January 19. Engineering, research and developmental work is under supervision of R. B. Cottrell, chief mechanical engineer, whose picture appeared on page 48 of the January 19 issue, improperly identified as that of C. L. Heater. Mr. Heater, vice-president of A.S.F., heads the entire Transportation Equipment division.

Paul D. Howard, who has been appointed national supervisor of railroad transportation sales for the reflective products division of the Minnesota Mining & Manufacturing Co. He will direct the firm's railroad sales of "Scotchlite" reflective sheeting and letters, and reflectorized railroad signs and delineators. Mr. Howard formerly was sales representative for the company's reflective products.

James E. Weaver has been appointed assistant traffic manager of the **Columbia-Southern Chemical Corporation.** Mr. Weaver has been associated with Columbia-Southern and its predecessor companies since 1937.

The **Farr Company** has appointed three new sales and service representatives, as follows: **Johnson Filter Sales Company,** Cleveland; **Pittsburgh Air Filter Service Company,** Pittsburgh, and **Air Filter Sales & Service—Detroit,** Detroit.

Gilbert C. Strege has been appointed president of the **Baker-Lull Corporation,** a newly acquired subsidiary of the **Baker-Raulang Company,** Cleveland, formerly known as the **Lull Manufacturing Company.**

Edmund Q. Sylvester, vice-president and director of the Griffin Wheel Company since 1946, has been elected executive vice-president.

Patrick Lamb and **Harry Conklin** have been elected vice-presidents.

Herbert D. Euwer, formerly assistant chief engineer, passenger cars, for the **American Car & Foundry Co.,** has been appointed chief engineer, passenger cars, with headquarters as before at St. Charles, Mo. He succeeds **Allen W. Clarke,** who has

Herbert D. Euwer

retired after 46 years of continuous service. Mr. Euwer was graduated from Pennsylvania State College and in 1929 joined A.C.F. at St. Charles as assistant mechanical engineer, specializing in passenger car work. He was appointed assistant chief engineer, passenger cars, in 1947.

Wayne Irwin, secretary and treasurer of the **United States Gypsum Company,** has been appointed vice-president and comptroller of the **Pullman Company,** succeeding the late **R. J. Lascelles.** Mr. Irwin has been

Wayne Irwin

associated with U.S. Gypsum in the accounting and financial field since his graduation from Drake University in 1929. In his new position with Pullman he will have complete responsibility for all accounting and comptrollership activities.

J. B. Flynn, formerly assistant manager of the railway sales department of the **Texas Company,** has been appointed manager of the department, with headquarters in New York. Mr. Flynn joined the company in 1918 as representative of the railway sales department in San Francisco. He was transferred to New York in 1933 as a district manager, and in 1935 was appointed assistant manager of the department.

Hugh Hazelton, Jr., has been appointed vice-president in charge of sales of the Ramapo Ajax division of the **American Brake Shoe Company,** with headquarters as before in Chicago. Mr. Hazelton joined the company in 1933, became sales representative for the Ramapo Ajax division in 1934, and for the American Brakeblok division in 1940. He was transferred to the export division in 1946 and in 1947 was appointed sales representative for the Ramapo division in Chicago, which position he held until his recent appointment.

Motorola, Inc., has announced plans for a large new factory to be located in Franklin Park, Ill., a suburb of Chicago. The plant will be located on a 27½-acre site and will offer about 270,000 sq. ft. of floor space.

FINANCIAL

Mahaffie Act Recap Plan Proposed for MP

Reorganization of the Missouri Pacific under the Mahaffie Act (Section 20b of the Interstate Commerce Act), rather than under Section 77 of the federal bankruptcy laws, has been proposed by the debtor company.

As explained by T. C. Davis, chairman of the board, in a January 29 letter to MP security holders, the present plan provides only for reorganization of the Missouri Pacific, but will be followed, "probably within 60 days," by reorganization plans for the subsidiary New Orleans, Texas & Mexico and International-Great Northern. "It is our opinion," Mr. Davis said, "that the MP is now solvent and that the NOT&M has been solvent for years. It is our belief that a separate reorganization of the I-GN will be much more beneficial to security holders of that railroad. We further believe that both the I-GN and MP are penalized severely under a system reorganization. The MP would not lose its investment in nor control of the NOT&M and I-GN in the separate reorganization which we will propose. After reorganization, the consolidation of these properties can be undertaken."

Under the plan, capitalization of the reorganized MP would total $518,585,130, excluding equipment obligations. This capitalization would exceed that

Comparison of Capitalization*

	Balance Sheet 12/31/51	I.C.C. Modified Plan	Missouri Pacific 20b Plan
1st Mort. Bonds			
Series A	$ 17,840,500		$ 17,840,500
Series F	95,000,000		94,180,000
Series G	25,000,000		25,000,000
Series H	25,000,000		25,000,000
Series I	61,200,000		61,170,000
Series B		$ 81,607,274	
Series C		81,607,274	
Secured Serial 5¼% Bonds	10,425,000	..	10,425,000
Gen. Mort. 4½% Income Bonds			
Series A		125,964,282	
Series B		8,433,750	
Gen. Mort. 4's	50,245,000	..	49,302,000
20-Yr. Conv. Gold Bonds	46,392,000	..	45,493,000
1st Plaza-Olive Bldg.	429,500	..	..
Little Rock & Hot Springs Western	1,140,000	..	1,140,000
Central Branch, U.P., 1st Mort. 4's	523,000		523,000
New Cont. Int. Deb. 4's, 1995	..	..	40,000,000
Total Bonded Debt.	$333,195,000	$297,612,580	$370,073,500
Stock			
Pref. 5%	$ 71,800,100	$ 90,994,822	
Pref. 4%			$140,380,200
Common—$100 Par	82,839,500		
Common—No Par—Class A		77,154,394	
Common—No Par—Class B		30,081,471	
Common—$10 Par			8,131,430
Total Stock	$154,639,600	$198,230,687	$148,511,630
Total Capitalization (excluding equipment obligations)	$487,834,600	$495,843,267	$518,585,130

*Equipment obligations to remain undisturbed—December 31, 1951, amount $48,687,116.

Comparison of Annual Charges*

	I.C.C. Modified Plan		Missouri Pacific 20b Plan	
	Principal Amount	Annual Charge	Principal Amount	Annual Charge
Fixed interest debt	$163,214,548	$ 6,528,582	$330,073,500	$13,202,940
Contingent interest debt—Gen. mort. 4½% income bonds, series A and B	134,398,032	6,047,911		
New cont. int. deb. 4's, 1995			40,000,000	1,600,000
Stock				
5% Pref.	90,994,822	4,549,741		
4% Pref.			140,380,200	5,615,208
Total	$388,607,402	$17,126,234	$510,453,700	$20,418,148

*Excludes equipment obligations, sinking fund provisions, and Plaza-Olive Building mortgage bonds.

of the latest I.C.C. plan by $22,741,863. Fixed interest requirements, again exclusive of equipment trusts, would be $13,202,940, plus a contingent interest requirement of $1,600,000 and preferred dividends of $5,615,208.

If holders of 25 per cent of the railroad's outstanding securities assent to the proposed plan, it will be submitted to the court having jurisdiction over the reorganization, with a request for permission to file the plan with the Interstate Commerce Commission. Favorable consideration of this request by the court would result in filing the plan with the I.C.C. and in suspension of proceedings under Section 77.

The debtor company is requesting Congress to amend Section 20b to correspond with Section 77 in requiring final assent to the plan by only 66 2/3 per cent of each class of security holders who actually vote, rather than the 75 per cent of the total of each class whose assent is required under the Mahaffie Act; basis for this request is that "since no coupons have been paid on the junior bonds for the past 20 years, there is some doubt that ownership of 75 per cent of these bonds can be found" in the 12 months allowed for consummation of a Mahaffie Act reorganization plan.

Mr. Davis' letter also expressed the opinion that the MP now had on hand enough cash to permit payment of accumulated interest on MP bonds, which would make possible a complete dismissal of pending reorganization proceedings, "if a way can be found to take care of maturity" of the convertible 5½ per cent bonds which were due in 1949. "The feasibility of a simple dismissal is being examined," he said.

Delaware, Lackawanna & Western.—*Seeks Two Seats on Nickel Plate Board.*—Division 4 of the I.C.C. has agreed to hold hearings on the Lackawanna's "motion for dismissal" in this case. The Lackawanna wants to vote its New York, Chicago & St. Louis stock and elect two directors; and it contends the I.C.C. lacks jurisdiction because the proposal would not constitute acquisition of control within the meaning of Section 5(2) of the Interstate Commerce Act (*Railway Age*, September 8, 1952, page 57).

The Nickel Plate, the Lehigh Valley, the Detroit & Toledo Shore Line and the Brotherhood of Locomotive Engineers requested the commission to deny the motion to dismiss. They asked a full hearing be held "on the merits of the application."

The I.C.C. said the Lackawanna motion relates solely to the control question, and a hearing on that alone is required. Expensive and time-consuming testimony on the "merits" might become extraneous if the motion to dismiss is granted. The commission then ruled that a hearing on the motion will be held, but did not name the time or location of such hearing.

Erie.—*Purchase.*—Division 4 of the I.C.C. has authorized this road to purchase, for $40,000, a segment of Bessemer & Lake Erie branch line near Meadville, Pa. The Erie will acquire approximately 2,490 feet of track, together with about 2,283 feet of sidetracks. The commission also approved an agreement granting the Erie trackage rights over an additional 1,599 feet of the B&LE branch, which connects with the Erie's main line at Meadville.

Kansas City Southern. — *Stock Split.*—This road has asked the I.C.C. to authorize a two-for-one split of its preferred and common stock. The road has 210,000 shares of non-cumulative 4 per cent preferred stock, par $100, and 510,000 shares of no-par common stock outstanding. It seeks authority to reduce the preferred par to 50 per share, and increase the number of shares to 420,000. Common shares would be increased to 1,020,000. This split would make the stock more attractive to the average investor, and tend to promote wider distribution of KCS shares, the road told the I.C.C. Stockholders of the road approved this stock split at a January 30 meeting.

New York Central.—*Real Estate.*—The NYC is, with the aid of outside counsel, studying possible disposal of its real estate holdings in New York City, William White, president, said at a press luncheon in New York on February 2. The holdings, Mr. White added, are a "major problem" as far as legal disposition of proceeds from their sale would be concerned, and this difficulty is complicated by the role the New Haven plays in the situation.

Reading.—*Acquisition of Central of New Jersey.*—The I.C.C. has approved this road's plan for acquiring control of CNJ by purchasing 8,400 shares of CNJ's Class A stock (*Railway Age*, December 8, 1952, page 16). Price of the stock should not exceed $24 a share plus commissions, the I.C.C. said. The Reading owns approximately 49.8 per cent of CNJ's outstanding stock, and acquisition of 8,400 additional shares will assure retention of control "when and if cumulative voting shall become effective as provided in the (1948) modification plan."

The Reading asked the commission for authority to purchase additional shares from time to time, and the I.C.C. granted this authority, provided the road pays no more than $24 a share plus commissions.

E. T. Moore, president of CNJ, told stockholders of the road last December that Reading's acquisition of con-

trol will "simply assure continuation of what has been in effect since we came out of reorganization—a majority of the board (of directors) will continue to be elected by stock owned by the Reading."

New Securities

Application has been filed with the I.C.C. by:

ILLINOIS CENTRAL.—To assume liability for $4,500,000 of series "37" equipment trust certificates, to finance in part 37 diesel units costing an estimated $6,016,200.

	Description and Builder	Estimated Unit Cost
2	2,250-hp. passenger units (Electro-Motive Division General Motors Corporation)	$242,823
10	1,500-hp. road-switchers (Electro-Motive)	151,239
14	1,500-hp. road-switchers (Electro-Motive)	156,731
4	1,500-hp. road-switchers (Electro-Motive)	162,435
1	1,500-hp. road-switchers (Electro-Motive)	165,782
6	1,500-hp. road-switchers (Electro-Motive)	167,927

The certificates, to be dated March 1, would mature in 30 semiannual installments of $150,000 each, beginning September 1, 1953. They would be sold by competitive bidding, with the interest rate to be set by such bids.

NEW YORK CENTRAL.—To issue $800,000 of 3¼ per cent promissory notes to the Bethlehem Steel Company in connection with acquisition of 15 all-welded steel covered freight barges. The barges, costing an estimated $67,500 each, will be used by NYC "to properly handle its freight traffic at the port of New York." The notes would call for payment in full on each barge in 20 consecutive quarterly installments. The notes would be issued in accordance with a conditional sales agreement, dated February 20, between the road and the steel company.

Division 4 of the I.C.C. has **authorized:**

CHESAPEAKE & OHIO.—To assume liability for $7,200,000 of equipment trust certificates, to finance in part 26 diesel-electric locomotive units and 750 freight cars costing an estimated $9,012,454 (*Railway Age*, January 19, page 51). Division 4 approved sale of the certificates for 99.4743 with interest at 3 per cent—the bid of Salomon Brothers & Hutzler and three associates—which will make the average annual cost of the proceeds to the road approximately 3.08 per cent. The certificates, dated February 1, will mature in 30 semiannual installments of $240,000 each, beginning August 1, 1953.

They were reoffered to the public at prices yielding from 2.2 to 3.1 per cent, according to maturity.

Security Price Averages

	Feb. 3	Prev. Week	Last Year
Average price of 20 representative railway stocks	69.64	69.60	55.92
Average price of 20 representative railway bonds	95.20	94.99	91.44

Dividends Declared

ALABAMA & VICKSBURG.—$3, semiannual, payable April 1 to holders of record March 6.

CLEVELAND & PITTSBURGH.—7% guaranteed, 87½¢; 4% special guaranteed, 50¢, quarterly, both payable March 2 to holders of record February 10.

DALLAS RAILWAY & TERMINAL.—common, 35¢, quarterly; 7% preferred, $1.75, quarterly, both payable February 2 to holders of record January 21.

GREAT NORTHERN.—non-cumulative preferred, $1, payable March 18 to holders of record February 25.

GREEN BAY & WESTERN.—common, $5, payable February 24 to holders of record February 13; class A debentures, $50, payable February 24.

LOUISVILLE, HENDERSON & ST. LOUIS.—$4, semiannual, payable February 15 to holders of record January 31.

MAINE CENTRAL.—5% preferred, $2.50, accumulated, payable March 2 to holders of record February 16.

NASHVILLE, CHATTANOOGA & ST. LOUIS.—$1, increased, payable March 2 to holders of record February 9.

NORFOLK SOUTHERN.—42½¢, quarterly, payable March 16 to holders of record February 28.

READING.—4% non-cumulative 1st preferred, 50¢, quarterly, payable March 12 to holders of record February 19.

SOUTHERN.—5% non-cumulative preferred, $1.25, quarterly, payable March 14, June 15 and September 15 to holders of record February 13, May 15 and August 14.

VICKSBURG, SHREVEPORT & PACIFIC.—common, $2.50, semiannual; 5% preferred, $2.50, semiannual, both payable April 1 to holders of record March. 6

CAR SERVICE

Fifth Revised I.C.C. Service Order No. 95 supplanted Fourth Revised Service Order No. 95 at 12:01 a.m. January 19. The order is that which makes D. W. Benton, assistant to chairman, Car Service Division, Association of American Railroads, the commission agent on matters relating to refrigerator cars.

The new order confines Mr. Benton's role to that of keeping the commission informed as to the reefer situation, i.e., it restores the situation which existed before the fourth revision of the order was issued. Under the latter, which was in effect from December 13, 1952, until it was supplanted on January 19, as noted above, Mr. Benton had authority over distribution of reefers.

I.C.C. Service Order No. 873 has been modified by Amendment No. 4, which set back the expiration date from January 15 until April 15. The order makes Richard H. Lambertson the commission agent with authority to control movements of tank cars.

RAILWAY OFFICERS

EXECUTIVE

Directors of the CHICAGO & ILLINOIS MIDLAND have elected **M. E. Gustaveson,** superintendent, as vice-president with jurisdiction over the operating department. **H. W. Watson,** operating vice-president, has been elected vice-president—accounting; **E. G. Young,** vice-president—personnel, has become vice-president — law; and **James E. Dare** has been made executive assistant to president.

M. I. Dunn, assistant general manager of the Chesapeake district of the CHESAPEAKE & OHIO at Richmond, Va., has been appointed assistant vice-president—construction and maintenance—of the system, at Huntington, W.Va.

Harry C. Wyatt, assistant general superintendent motive power of the NORFOLK & WESTERN, has been named vice-president and general manager, with headquarters as before at Roanoke, Va., succeeding the late **Carl H. Tabor.**

R. Fred Smith, assistant vice-president—traffic (sales) of the NEW YORK CHICAGO & ST. LOUIS (NICKEL PLATE) at Cleveland, will retire from that position on March 31, at his own request, but will continue to serve as traffic consultant. **Sylvester J. Witt,** assistant vice-president—traffic (rates), will succeed Mr. Smith, and **John J. Fitzpatrick,** chairman of the Traffic Executive Association—Eastern Railroads,

R. Fred Smith

at New York, will succeed Mr. Witt as assistant vice-president — traffic (rates).

Mr. Smith was born at Milford Haven, South Wales, August 9, 1887, and entered railroad service in 1903 as a junior clerk with the Wheeling & Lake Erie (now part of the Nickel Plate) at Toledo, Ohio. He subsequently served as chief clerk to general coal and ore agent, freight traffic representative, general agent, and chief clerk to receiver and general manager. From 1917 to 1924 Mr. Smith was traffic manager of the Cambridge Collieries Company, Cleveland. He returned to the W&LE in 1924 as superintendent at Toledo, becoming general freight agent at Cleveland in 1926, general traffic manager in January 1933, and vice-president — traffic, in July 1943. Mr. Smith was appointed assistant vice-president — traffic (sales) of the Nickel Plate in September 1949.

John J. Fitzpatrick

Mr. Fitzpatrick was born at Baltimore April 24, 1900, and attended the University of Maryland (LL.B., 1924) and Georgetown University for post graduate work in law. He entered railroad service July 13, 1915, in the local freight office of the Baltimore & Ohio at Baltimore, and later served in the traffic department until July 1, 1929. He then became attorney and assistant general attorney of the B&O at Baltimore. From April 1, 1941, to March 31, 1946, Mr. Fitzpatrick was general attorney of the Chesapeake & Ohio Lines (including the Nickel Plate and Pere Marquette), at Cleveland. He became chairman of the Traffic Executive Association—Eastern Railroads at New York on April 1, 1946.

E. B. Stanton, vice-president and general manager of the SPOKANE, PORTLAND & SEATTLE, has resigned from that position to accept the position of vice-president—executive department of the NORTHERN PACIFIC. Succeeding Mr. Stanton as vice-president of the SP&S at Portland, Ore., is **J. C. Moore,** traffic manager. **E. H. Showalter** has assumed Mr. Stanton's duties as general manager.

A detailed announcement of these SP&S changes, which became effective January 1, was prepared for the January 12 *Railway Age*, but because of

E. B. Stanton

a near-record year-end peak of railway personnel changes, publication of the news has inadvertently been seriously delayed.

Mr. Stanton received his engineering degree from St. Mary's College in Oakland, Cal. He joined the Camas Prairie (a subsidiary of NP and Union Pacific) in 1927, serving for 16 years in its engineering and operating departments. In 1943 he became associated with the SP&S as engineer maintenance of way. During 1946 he was appointed assistant general manager, and a year later became vice-president and general manager.

Mr. Moore began his railway career with a Union Pacific predecessor—the Oregon Railroad & Navigation Co.—at Huntington, Ore., in 1903. He moved to Portland at the time the SP&S was under construction between Spokane and Portland. In September 1909, he entered that company's traffic department where he served as rate clerk, then assistant chief clerk, and later chief clerk. He was named city freight agent there in 1920, and was further

J. C. Moore

promoted to general agent in 1924. In 1954 he was named assistant to general freight agent, and within a year was again promoted to assistant general freight agent. It was in 1944 that he assumed the duties of traffic manager.

FINANCIAL, LEGAL & ACCOUNTING

J. E. McWhite has been appointed auditor of receipts of the ATLANTA & WEST POINT, the WESTERN OF ALABAMA and the GEORGIA, at Atlanta, Ga., succeeding **E. T. Fuller,** who has retired after more than 40 years of continuous service.

James Patrick Canny, assistant general attorney of the ERIE at Cleveland, has been promoted to general attorney at New York, succeeding **Grover R. James,** who retired on January 31, in accordance with the company's "retirement at 65" policy, after 39 years of service. Mr. James plans to continue his interest in railroad matters. He expects to represent a group of railroads in connection with legislative matters in New York, with offices at 37 Wall street.

W. E. Steptoe, special accountant in the office of comptroller of the READING, has been appointed, assistant to comptroller, at Philadelphia.

C. F. Gilroy, auditor freight accounts of the ATCHISON, TOPEKA & SANTA FE at Topeka, Kan., has been appointed auditor of the Santa Fe's Coast lines at Los Angeles. **E. E. Stein,** assistant to general auditor at Chicago, succeeds Mr. Gilroy at Topeka, while **Flory Mauriocourt,** chief clerk, succeeds Mr. Stein.

John A. Bennewitz, assistant western general counsel of the UNION PACIFIC at Omaha has retired. Mr. Bennewitz was graduated from Creighton University in 1901 and received his law degree at Georgetown University. Prior to joining the UP, he worked as a reporter for the Washington Times and the Omaha World-Herald, and also served as secretary to the late Senator Gilbert M. Hitchcock. In 1912 he became associated with the UP as assistant attorney. His appointment as general attorney occurred in 1929, and in 1935 he was named assistant western general counsel.

OPERATING

George M. Leilich has been appointed general superintendent of the WESTERN MARYLAND at Baltimore. Mr. Leilich was formerly division superintendent of the LEHIGH VALLEY at Buffalo, N.Y.

As *Railway Age* announced January 19, **James L. Monahan,** assistant superintendent of the SPOKANE, PORTLAND & SEATTLE, has been promoted to superintendent. Mr. Monahan has been with the company since July 1919.

James L. Monahan

He began his service as telegrapher-agent, and was subsequently chief dispatcher and trainmaster. He has been assistant superintendent since February 1948.

The DENVER & RIO GRANDE WESTERN has combined its Alamosa and Pueblo divisions "to provide a more efficient and economical operation" as a result of the growing importance of the Pueblo Gateway. Most territory in the former Alamosa division now is consolidated with the Pueblo division under Superintendent **L. B. Coleman**—but the territory from Salida to Gunnison and Gunnison to Sapinero, and the Monarch, Baldwin and Crested Butte branches have been absorbed by the Grand Junction division, under Superintendent **E. R. Moran. John C. Kenefick,** trainmaster—roadmaster in the Rio Grande's Moffat territory at Steamboat Springs, has been named assistant division superintendent of the enlarged Pueblo division at Alamosa. In connection with the consolidation

Mr. Coleman announced the following appointments: **J. B. Norwood,** trainmaster; **J. F. Selby,** trainmaster—roadmaster; and **T. J. Cummins,** road foreman of equipment and assistant superintendent, safety.

E. H. Showalter, superintendent of the SPOKANE, PORTLAND & SEATTLE, has been appointed general manager, succeeding in that capacity **E. B. Stanton,** who has resigned as vice-president and general manager to re-enter service with the NORTHERN PACIFIC as vice-president — executive department. **J. C. Moore,** SP&S traffic manager, has succeeded Mr. Stanton as vice-president. Mr. Showalter started his railroad career as a telegrapher-

E. H. Showalter

operator for the Chicago, St. Paul, Minneapolis & Omaha at St. Paul in 1905. In 1907 he went to the NP where he worked as operator, dispatcher, trainmaster and assistant superintendent. From 1917 to 1920 he served with the Russian Railroad Service Corps in Siberia. Following his return to the NP in 1920 he served as dispatcher, chief dispatcher and trainmaster, and in 1941 became assistant superintendent. He was appointed superintendent of the SP&S at Portland in 1942.

U. S. Vierling, trainmaster of the CHICAGO & EASTERN ILLINOIS at Danville, Ill., has been appointed assistant superintendent at Evansville, Ind. **W. G. Hofmann,** car service agent at Chicago, succeeds Mr. Vierling as trainmaster at Danville. **J. T. Warren** has been appointed trainmaster at Evansville.

J. E. Lester has been appointed assistant general manager of the Northern district, Western lines, of the ATCHISON, TOPEKA & SANTA FE, at La Junta, Colo. He succeeds **L. M. Olson,** promoted. **J. P. Spears** succeeds Mr. Lester as superintendent at Pueblo, Colo., while **J. H. Blake** has been appointed assistant superintendent at El Paso, Tex., succeeding Mr. Spears. **J. W. Barriger** has been appointed trainmaster at Carlsbad, N.M., succeeding Mr. Blake.

Charles C. Clinker has been named district safety engineer of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Milwaukee.

E. G. Kiesele, division superintendent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Savanna, Ill., has been appointed superintendent of safety at Chicago. **O. A. Beerman,** division superintendent at Marion, Iowa, has retired. His successor is **F. G. McGinn,** former assistant superintendent at Perry, Iowa. **R. W. Riedl,** trainmaster at St. Paul, becomes assistant superintendent at Perry; **J. R. Werner,** trainmaster at Milwaukee, succeeds Mr. Riedl; and **J. F. Elder,** transportation assistant to general manager at Chicago, replaces Mr. Werner. **W. J. Hotchkiss,** superintendent of the Milwaukee division, succeeds Mr. Kiesele, while **J. A. Jakubec,** superintendent at Chicago, replaces Mr. Hotchkiss, and is succeeded in turn by **G. F. Wilson,** superintendent at Minneapolis. **R. F. Fairfield,** assistant superintendent at Bensenville, Ill., has been named superintendent at Minneapolis, and **R. H. Love,** trainmaster at Portage, Wis., has been named assistant superintendent at Bensenville. **M. Garelick,** trainmaster at Bensenville, becomes trainmaster at Portage, Wis., while **W. O. Harnish,** transportation assistant to general manager at Chicago, has been named trainmaster at Bensenville.

Mr. Beerman started with the Milwaukee in 1907 as a telegraph operator, becoming assistant superintendent at Milwaukee in 1936. He served subsequently as superintendent at Ottumwa, Iowa, 1939; Terre Haute, Ind., 1940; and Marion, 1942.

Mr. Fairfield began his railway career with the Milwaukee in 1936, at Minneapolis, where he served as yardmaster and assistant trainmaster. In 1951 he became assistant superintendent at Sioux City, Iowa, transferring to Bensenville in 1952.

Mr. McGinn started with the Milwaukee in 1930 as a telegraph operator. He advanced through the operating department, becoming assistant superintendent at Dubuque, Iowa, in 1949. A year later he was transferred to Savanna, and in October 1952 to Perry.

E. P. Frasher has been appointed trainmaster of the St. Lawrence division of the NEW YORK CENTRAL at Watertown, N.Y.

TRAFFIC

P. G. Nagle has been appointed general passenger agent of the CHICAGO, INDIANAPOLIS & LOUISVILLE, succeeding **E. C Brown,** who has been transferred to other duties. Mr. Nagle entered the Monon's service in 1941 as an office boy in the comptroller's office; a year later he transferred to the passenger department. From 1943 to 1946 he served with the U.S. Marine Corps, returning to his former position upon receipt of his discharge. In 1948 he was appointed city passenger agent, and in 1950 became general agent.

Thomas K. McAleavey, chief rate clerk of the UNION PACIFIC, has been appointed assistant to vice-president, traffic, at Omaha, succeeding **William V. Kee,** who has been named assistant

William V. Kee

traffic manager at Portland, Ore. Mr. Kee joined the UP in 1937 as a stenographer in the traffic department, subsequently serving as secretary, general clerk and chief clerk. In 1952 he

Thomas K. McAleavey

was named assistant to vice-president, traffic.

Mr. McAleavey attended Creighton University. In 1926 he joined the UP, advancing to the position of chief rate clerk just prior to his latest promotion.

William J. Heerman has been appointed assistant general freight agent of the WABASH at Chicago.

Clifford C. Bruck has been appointed assistant to vice-president — traffic of the WESTERN MARYLAND at Baltimore, succeeding **Samuel B. Dewees,** who has been appointed general freight agent, sales and service—Baltimore district. **Keller McCoskrey** has been appointed industrial agent

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and **Robert H. Kirckhoff** has been named assistant to freight traffic manager, sales and service. **James G. Lawless** has been appointed general agent at San Francisco, succeeding **Arthur E. Sinclair,** assigned to temporary duty as consultant.

John A. Ferguson, general coal freight agent of the ERIE at Cleveland, retired on January 31 because of ill health, after 45 years of service.

H. G. Stotesbury, assistant to traffic manager of the MACON, DUBLIN & SAVANNAH, has been appointed general freight agent, a newly created position, with headquarters as before at Macon, Ga. Mr. Stotesbury will have charge of rate adjustments and divisions. **Robert E. Wells** succeeds Mr. Stotesbury as assistant to traffic manager.

S. E. Dillon, general agent of the CHICAGO GREAT WESTERN at Wichita, Kan., has retired.

Harry J. Nevin, general passenger agent of the CANADIAN NATIONAL at Montreal, has been appointed manager of the tourist and convention bureau, succeeding **J. S. McDonald,** deceased. **Joseph A. Breau,** division freight and district passenger agent at Campbellton, N.B., succeeds Mr. Nevin as general passenger agent at Montreal.

M. A. Oberg, general agent of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC at Kansas City, Mo., has retired. **C. J. Peck, Jr.,** city passenger agent, has been named district passenger agent at that point.

J. G. Roberts, assistant general freight agent of the ATCHISON, TOPEKA & SANTA FE, has been appointed general freight agent at San Francisco. **J. R. Walter** has been named assistant general freight agent there.

Everett W. Bopp, general agent of the MINNEAPOLIS & ST. LOUIS at Seattle, has been promoted to freight traffic manager at Minneapolis, succeeding **Oscar M. Sandahl,** who has been named assistant vice-president—traffic. **Richard C. Volkert,** acting industrial manager, has been named director of industrial development.

Everett W. Bopp

Robert C. Erickson, commercial agent, has been appointed general agent at Chicago, succeeding **J. J. Mullen,** who has been transferred to New Orleans.

Mr. Bopp joined the M&StL in 1939 as traveling agent at Omaha. Two years later he transferred to Kansas City, and in 1948 was promoted to general agent at Seattle.

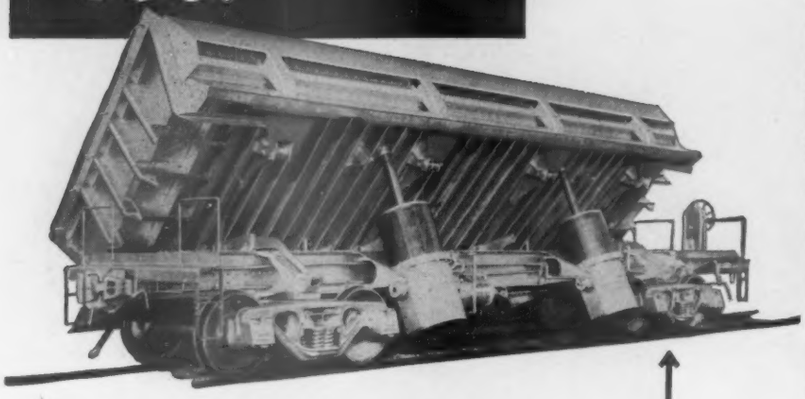
Eldon D. Pence, general agent of the KANSAS CITY SOUTHERN at Fort Smith, Ark., has been promoted to district traffic manager at Los Angeles. Succeeding Mr. Pence is **Gerald E. Riggs. Harry L. Sullivan,** district traffic manager at Los Angeles, has been named general agent at Denver.

W. H. McPherson has been appointed district freight and passenger agent of the UNION PACIFIC at Salinas, Cal.

ENGINEERING

As *Railway Age* reported January 19, **Henry A. Aalberg,** assistant chief engineer—system, of the CHICAGO,

BOOSTS EARNINGS TOO!



The Differential Air Dump Car has a way with operating expenses — cuts 'em down!

There's another pair of massive muscles on the other side of the car, too, means two-way dumping and greater flexibility.

They're built to take rough treatment — whether it's the slam-banging of the clam or the sudden dumping of tons of hot slag. These cars can take it and can come back faster for more.

Higher ratio of payload to dead weight! Fewer trips to the shop and shorter stays when they do go! Add all these up and it spells lower operating costs — another way to say "Boosted Earnings". Write for the full story on these cars.

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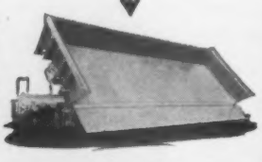

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Only by such exacting care can we be sure of having the quality of steel needed to produce rolled steel wheels that will meet the exacting specifications of AAR.

In Edgewater open-hearth furnaces, advanced metallurgical practices insure the quality of steel needed to meet the exacting requirements of the railroads.

After the ingot shown above has been carefully cooled, it is "sliced" into blocks, which are weighed, inspected and reheated for forging.

In the forging presses, blocks become blanks, and begin to look like wheels. They then go to the rolling mill, where rim, plate and flange are formed.

After the final rolling operation, the wheels are machined to the dimensions called for by AAR specifications.

Edgewater Steel Company

PITTSBURGH, PENNA.

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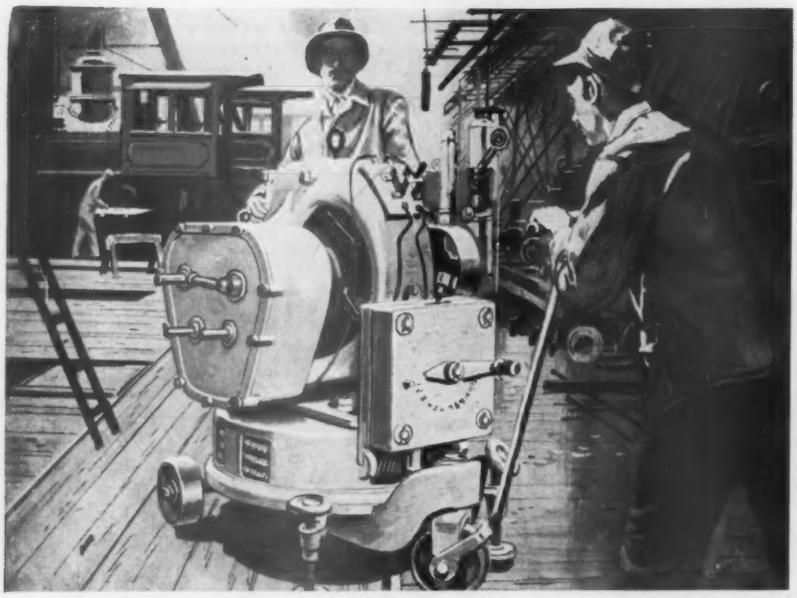

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BURLINGTON & QUINCY, has been appointed chief engineer — Burlington Lines, to succeed **Herbert R. Clarke,** who retired January 1 after more than 45 years of service. Mr. Aalberg attended Highland Park College, and entered railway service with the Burlington in May 1910. After serving as field draftsman, topographer and levelman on location in Wyoming, Colorado and Montana, he became draftsman in office of assistant chief engineer at Lincoln, Neb., in Septem-

Henry A. Aalberg

ber 1911. Seven months later he went to Denver as instrumentman on maintenance on the McCook division. From June 1916 through June 1922 he served as division engineer at Lincoln, following which he became chief of a locating party in Wyoming. In November 1922, he returned to his former position at Lincoln, where he remained only four months before being transferred to Denver as division engineer of the McCook division. In February 1937, Mr. Aalberg was named assistant chief engineer of CB&Q Lines West at Lincoln. His promotion to assistant chief engineer of the entire system followed in April 1946.

N. E. Smith has been appointed division engineer of the CHICAGO, MILWAUKEE, ST. PAUL & PACIFIC, at Minneapolis. He succeeds **Ernest W. Bolmgren,** who has retired.

Richard S. Bennett has been appointed engineer structural design of the SOUTHERN PACIFIC at San Francisco, succeeding **Victor R. Cooledge.**

F B. Manning, acting engineer bridges and structures of the CHESAPEAKE & OHIO, has been named engineer bridges and structures of the Pere Marquette district. **R. T. Guest,** acting division engineer, has become division engineer at Detroit.

John P. Hiltz, Jr., has been appointed chief engineer maintenance of way of the NEW YORK CENTRAL, effective February 1. The position, a newly created one, is incident to a separation, throughout the system, of maintenance of way functions from

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purely engineering functions. Mr. Hiltz was formerly engineer maintenance of way of the DELAWARE, LACKAWANNA & WESTERN at Scranton, Pa. Mr. Hiltz was born at Baltimore 41 years ago and was graduated from Carnegie Insti-

John P. Hiltz, Jr.

tute of Technology (C.E., 1934). He began his railroad career in 1934 in the engineering department of the Pennsylvania, which he served in various engineering and maintenance capacities until he became engineer of track of the DL&W in March 1945. Mr. Hiltz served as engineer maintenance of way of the Lackawanna at Scranton, Pa., from March 1948 until his recent appointment on the NYC.

Walker Paul, assistant to chief engineer of the SOUTHERN PACIFIC, has retired. Mr. Paul joined the SP in 1922, serving in its valuation department. In 1941 he became executive assistant in the president's office, and was promoted to assistant to chief engineer in 1945.

J. V. Middleton, assistant division engineer of the Syracuse division of the NEW YORK CENTRAL at Syracuse, N.Y., has been appointed division engineer of the Pennsylvania division at Jersey Shore, Pa.

John T. Hoelzer, division engineer of the BALTIMORE & OHIO at Cincinnati, has been promoted to engineer maintenance of way of the Central region at Pittsburgh, succeeding **H. H. Harsh,** deceased. **Clarence E. Jackman,** division engineer at Newark, Ohio, has been transferred to Cincinnati, to replace Mr. Hoelzer.

John B. Mitchell, valuation engineer of the GREAT NORTHERN, has retired. He has been succeeded by **Carlton F. Olson,** assistant valuation engineer.

James F. Zanolio, division engineer of the DENVER & RIO GRANDE WESTERN at Salt Lake City, has been appointed valuation engineer at Denver, a newly created position. **A. C. Black,** supervisor of structures for the Grand Junc-

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tion division, has been named to succeed Mr. Zanolio.

L. L. Shirey, assistant bridge engineer of the CHESAPEAKE & OHIO, has been appointed bridge engineer of the Chesapeake district, with headquarters as before at Richmond, Va.

Paul G. Martin, division engineer of the UNION PACIFIC at Los Angeles, has been named division engineer at Kansas City, Mo., succeeding **R. M. Jolley,** who has retired.

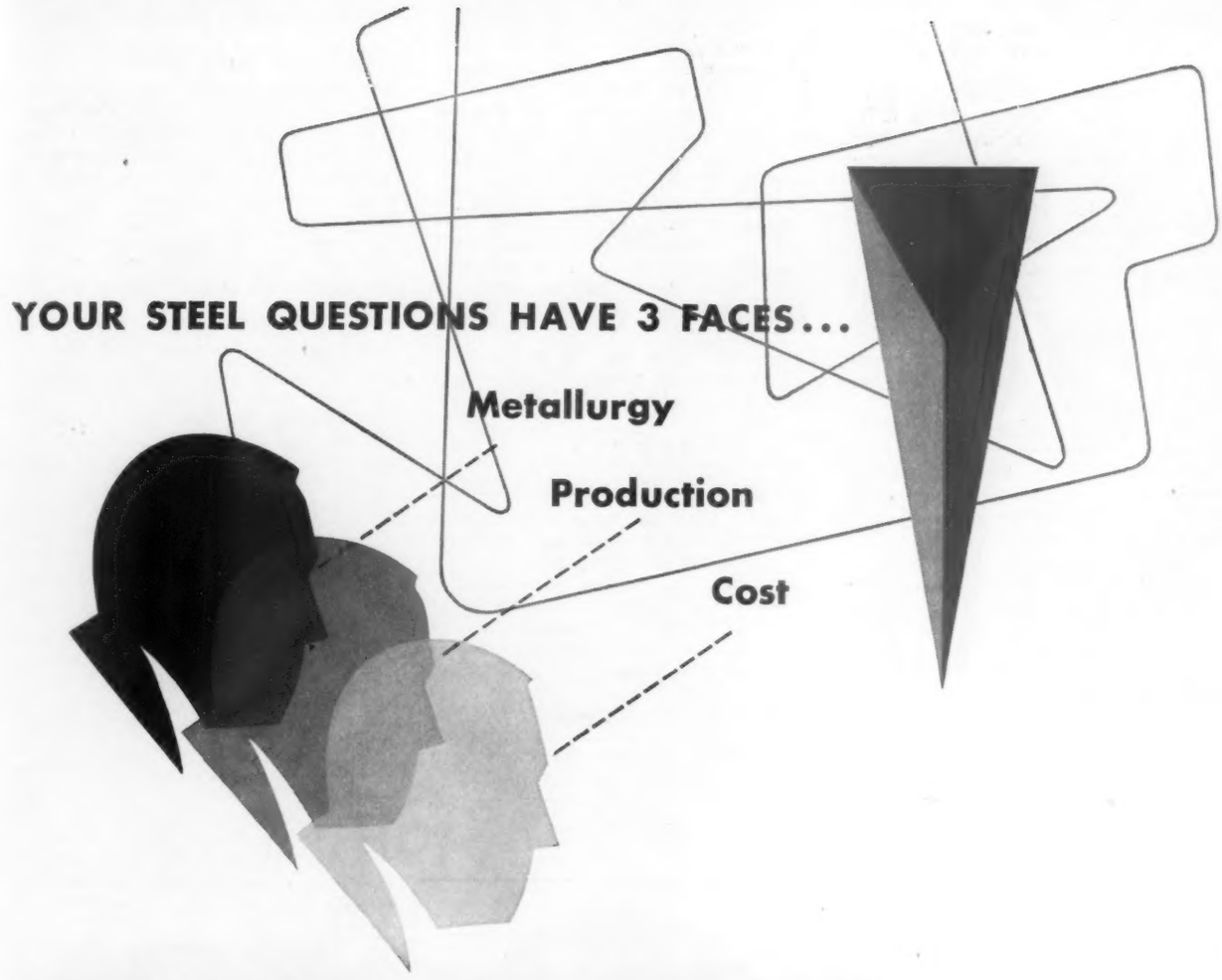
Clark M. McVay, consulting engineer of the NEW YORK CENTRAL at Cleveland, has retired after more than 47 years of service. Mr. McVay was born at Xenia, Ohio, April 3, 1886, and began his career with the Pennsylvania at Cincinnati in June 1905. He joined the Toledo & Ohio Central (NYC) as assistant division engineer at Bucyrus, Ohio, December 1, 1907, transferring to Charleston, W.Va., in February 1909. For the next 20 years Mr. McVay served in various capacities in the Central's engineering department in the coal mining areas of West Virginia, during which he helped plan and develop the New River and Kanawha mining districts. On June 1, 1927, Mr. McVay was appointed engineer of construction for the 30-mile-long Nicholas, Fayette & Greenbrier in West Virginia, a post he held until the mine-serving road was completed in 1931. After serving at Cleveland and Columbus, Mr. McVay was appointed assistant superintendent of the Central's Alliance, Ohio, branch on December 1, 1934, and was a key figure in planning the eastern Ohio coal mining district. He became assistant consulting engineer at Cleveland November 1, 1944, and consulting engineer January 1, 1947.

SIGNALING & COMMUNICATIONS

T. B. Thompson, assistant signal engineer of the ILLINOIS CENTRAL, has

T. B. Thompson

been appointed signal engineer, succeeding **H. G. Morgan,** who has retired. **George Pipas,** field engineer



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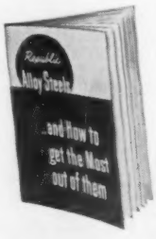

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at Memphis, has been named special engineer in the signal department at that point.

Mr. Thompson was graduated from Southern Illinois University in 1931, and in 1938 secured a master's degree at the University of Illinois. Starting in 1928 he worked summers for the IC as a signal helper, and in 1939 became employed in the same capacity, being promoted to wireman in 1940 and to draftsman in 1941. Subsequently, he served as chief operator of rail detector car and supervisor of system rail detector cars. In 1946 he was named special engineer, signal department, and in 1950 was appointed assistant signal engineer.

Mr. Morgan received a degree in electrical engineering from Purdue University in 1904, and entered the service of the IC in 1907 as draftsman in the signal department. He joined the Chicago & North Western in 1909 as chief draftsman in the signal department, and in 1910 moved to the General Railway Signal Company as assistant engineer. He returned to the IC in 1913 as office engineer, signal department, and was appointed signal engineer in 1920.

T. T. Hart has been appointed signal engineer of the NEW YORK CENTRAL, Lines East, including the BOSTON & ALBANY, with headquarters at Springfield, Mass., succeeding **A. S. Haigh,** who retired on January 31 under the pension regulations of the company, after more than 50 years of service. Mr. Haigh was born at Utica, N.Y., July 29, 1886, and attended Rensselaer Polytechnic Institute. He entered railroad service in 1902 as telegraph operator with the Rome, Watertown & Ogdensburg (now NYC) and in 1909 became a draftsman for the Federal Signal Company. Mr. Haigh then served the NYC from 1910 to 1940 as draftsman, chief draftsman, assistant engineer and office engineer at Albany. He was appointed assistant signal engineer at Albany in 1940 and became signal engineer there in 1949, transferring to Springfield in 1951.

SPECIAL

Albert J. Sienolf has been appointed head of the CHESAPEAKE & OHIO's new promotion and merchandising section at Cleveland.

Carl F. Westcott, general agent of the KANSAS CITY SOUTHERN at Denver, has been appointed special representative there.

W. J. Prueter, assistant tariff publishing agent of the TRANS-CONTINENTAL FREIGHT BUREAU—WESTERN TRUNK LINE COMMITTEE, has been appointed joint tariff publishing agent, succeeding the late **L. E. Kipp.**

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OBITUARY

Henry A. Stahl, 90, former assistant treasurer of the NEW YORK CENTRAL and treasurer of the Grand Central branch of the Railroad Y.M.C.A., died on January 29 at his home in Chappaqua, N.Y., after a short illness. Mr. Stahl retired in 1933.

Frank H. Witting, general agent of the CENTRAL OF NEW JERSEY at St. Louis, died on January 12.

Fred W. Stetekluh, comptroller of the NORTHERN PACIFIC, died January 26. Mr. Stetekluh entered railroad work as an extra gang timekeeper on the Chicago, St. Paul, Minneapolis & Omaha in 1906. He subsequently served in the accounting department of the Omaha, the Chicago Great Western and the Soo Line before joining the NP in 1918 as a special accountant. He was promoted to general auditor in 1946 and in 1948 was elected comptroller.

Carl H. Tabor, 59, vice-president and general manager of the NORFOLK & WESTERN, died on January 30 at his home in Roanoke, Va. Born in Baptist Valley, Va., September 30, 1893, Mr. Tabor entered railway service as a water boy in the maintenance of way department of the N&W May 1, 1907, later serving as timekeeper and yard clerk. During World War I he served overseas with the 315th Field Artillery and was commissioned a second lieutenant, later becoming a major in the

Carl H. Tabor

F.A. Reserve. Mr. Tabor returned to the N&W in July 1919 as assistant yardmaster at Wilcoe, W. Va., subsequently becoming terminal trainmaster at Bluefield, W. Va., and trainmaster of the Pocahontas and Scioto divisions. He was appointed superintendent of the Pocahontas division in December 1936, transferring to the Scioto division two years later. He was advanced to assistant general superintendent of the Western General division in June 1939, general superintendent in 1940, general manager on January 1, 1942, and vice-president and general manager in May 1946.

Meetings & Conventions

The following list gives names of secretaries; dates and places of next or regular meetings.

AIR BRAKE ASSOCIATION.—Lawrence Wilcox, Room 827, 80 E. Jackson Blvd., Chicago 4, Ill.

ALLIED RAILWAY SUPPLY ASSOCIATION.—C. F. Weil, P. O. Box 5522, Chicago 80, Ill.

AMERICAN ASSOCIATION OF BAGGAGE TRAFFIC MANAGERS. — T. R. Stanton, 1450 Railway Exchange Bldg., St. Louis 1, Mo. Annual meeting, June 9-11, 1953, Hotel Statler, Detroit, Mich.

AMERICAN ASSOCIATION OF PASSENGER RATE MEN.—Paul Nordgren, Chicago, North Shore & Milwaukee, 105 W. Madison St., Chicago 2, Ill.

AMERICAN ASSOCIATION OF PASSENGER TRAFFIC OFFICERS. — B. D. Branch, Eastern Timetable Distributing Company, Liberty Street Terminal, New York 6, N. Y.

AMERICAN ASSOCIATION OF RAILROAD SUPERINTENDENTS.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, June 2-4, 1953, La Salle Hotel, Chicago, Ill.

AMERICAN ASSOCIATION OF TRAVELING PASSENGER AGENTS.—C. A. Melin, P. O. Box 5025, Cleveland.

AMERICAN COUNCIL OF RAILROAD WOMEN.—Eleanor Runquist, Pullman Company, Merchandise Mart Plaza, Chicago 54, Ill.

AMERICAN RAILWAY BRIDGE AND BUILDING ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 15-17, 1953, Conrad Hilton Hotel, Chichago, Ill.

AMERICAN RAILWAY CAR INSTITUTE.—W. C. Tabbert, 19 Rector St., New York 6, N. Y.

AMERICAN RAILWAY DEVELOPMENT ASSOCIATION. — P. R. Farlow, Illinois Central, 135 E. Eleventh Pl., Chicago 5, Ill. Annual meeting, April 20-22, 1953, Battle House Hotel, Mobile, Ala.

AMERICAN RAILWAY ENGINEERING ASSOCIATION.—Works in cooperation with the Association of American Railroads, Engineering Division—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 17-19, 1953, Palmer House, Chicago, Ill.

AMERICAN RAILWAY MAGAZINE EDITORS ASSOCIATION.—T. J. Zirbes Jr., Rock Island Lines News Digest, La Salle Street Station, Chicago 5, Ill.

AMERICAN SHORT LINE RAILROAD ASSOCIATION.—C. E. Huntley, 2000 Massachusetts Ave., N. W., Washington 6, D. C. Special meeting, June 23, 1953, Haddon Hall, Atlantic City, N. J.

AMERICAN SOCIETY FOR TESTING MATERIALS.—R. J. Painter, 1916 Race St., Philadelphia 3, Pa. Spring meeting and committee week, March 2-6, 1953, Hotel Statler, Detroit, Mich. Annual meeting, June 29-July 3, 1953, Chalfonte-Haddon Hall, Atlantic City, N. J.

AMERICAN SOCIETY OF MECHANICAL ENGINEERS.—C. E. Davies, 29 W. 39th St., New York 18, N. Y.
Railroad Division — E. L. Woodward, *Railway Mechanical and Electrical Engineer*, 79 W. Monroe St., Chicago 3, Ill.

AMERICAN WOOD-PRESERVERS' ASSOCIATION.—W. A. Penrose, 839 Seventeenth St., N. W., Washington 6, D. C. Annual meeting, April 28-30, 1953, Hotel Cleveland, Cleveland, O.

ASSOCIATED TRAFFIC CLUBS OF AMERICA.—R. A. Ellison, Cincinnati Chamber of Commerce, 1203 Federal Reserve Bank Bldg., Cincinnati 2, O.

ASSOCATION OF AMERICAN RAILROAD DINING CAR OFFICERS.—W. F. Ziervogel, 605 S. Ranken Ave., St. Louis 3, Mo. Annual meeting, October 13-15, 1953, Gung Hotel, New Orleans, La.

ASSOCIATION OF AMERICAN RAILROADS.—George M. Campbell, Transportation Bldg., Washington 6, D. C.
Operations and Maintenance Department.—J. H. Aydelott, Vice-president, Transportation Bldg., Washington 6, D. C.
Operating-Transportation Division. — L. R. Knott, 59 E. Van Buren St., Chicago 5, Ill.
Operating Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill.
Transportation Section.—H. A. Eaton, 59 E. Van Buren St., Chicago 5, Ill.
Communications Section.—A. H. Grothmann, 59 E. Van Buren St., Chicago 5, Ill.
Fire Protection and Insurance Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting. October 12-14, 1953, Hotel Statler, St. Louis, Mo.
Freight Loss and Damage Prevention Section.—G. H. Ruhle, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, May 13, 1953, Conrad Hilton Hotel, Chicago, Ill.
Freight Station Section.—W. E. Todd, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, May 26-28, 1953, Hotel Statler, Detroit, Mich.
Medical and Surgical Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, April 6, 1953, Drake Hotel, Chicago, Ill.
Protective Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, May 12-14, 1953, Williamsburg Inn, Williamsburg, Va.
Safety Section.—H. S. Dewhurst, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 2-4, 1953, Hotel Statler, St. Louis, Mo.
Electrical Section of the Engineering and Mechanical Divisions.—S. W. Marras, 59 E. Van Buren St., Chicago 5. Ill. Annual meeting, June 24-26, 1953, Convention Hall, Atlantic City, N. J.
Engineering Division.—E. G. Gehrke, 59 E. Van Buren St., Chicago 5, Ill.
Construction and Maintenance Section.—Neal D. Howard, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, March 17-19, 1953, Palmer House, Chicago, Ill.
Signal Section.—R. H. C. Balliet, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, September 28-30, 1953, Chase Hotel, St. Louis, Mo.
Mechanical Division.—Fred Peronto, 59 E. Van Buren St., Chicago 5, Ill. Annual meeting, June 22-26, 1953, Convention Hall, Atlantic City, N. J.
Purchases and Stores Division.—John L. Timanus, Transportation Bldg., Washington 6, D. C. Annual meeting. June 22-26, 1953, Convention Hall, Atlantic City, N. J.
Freight Claim Division.—C. C. Beauprie, 59 E. Van Buren St., Chicago 5. Ill. Annual meeting, May 12-14, 1953, Conrad Hilton Hotel, Chicago.
Car Service Division.—Arthur H. Gass, Chairman, Transportation Bldg., Washington 6, D. C.
Finance, Accounting, Taxation and Valuation Department. — Arthur R. Seder, Vice-president, Transportation Bldg., Washington 6, D. C.
Accounting Division.—R. E. Keefer, Transportation Bldg., Washington 6, D. C. Annual meeting, June 2-4, 1953, Edgewater Beach Hotel, Chicago.
Treasury Division.—R. E. Keefer, Transportation Bldg., Washington 6, D. C. Annual meeting, September 17-19, 1953, Grand Hotel, Mackinac Island, Mich.
Traffic Department.—Walter J. Kelly, Vice-president, Transportation Bldg., Washington 6, D. C.

ASSOCIATION OF INTERSTATE COMMMERCE COMMISSION PRACTITIONERS.—Miss Sarah F. McDonough, Executive Secretary, 2218 I.C.C. Building, Washington 25, D. C. Annual meeting, May 13-14, 1953, St. Francis Hotel, San Francisco, Cal.

ASSOCIATION OF RAILROAD ADVERTISING MANAGERS.—C. D. Perrin, Asst. Secy., 85 West Harrison St., Chicago 5, Ill.

ASSOCIATION OF RAILWAY CLAIM AGENTS.—F. L. Johnson, Gulf, Mobile & Ohio, 104 St. Francis St., Mobile 5, Ala. Annual meeting, May 20-22, 1953, Hotel Statler, Detroit, Mich.

BRIDGE AND BUILDING SUPPLY ASSOCIATION.—L. R. Gurley, Modern Railroads, 201 N. Wells St., Chicago 6, Ill. Exhibit in conjunction with the meetings of the American Railway Bridge & Building Association and Roadmasters & Maintenance of Way Association, September 14-17, 1953, The Coliseum, Chicago, Ill.

CANADIAN RAILWAY CLUB. — C. R. Crook, P. O. Box 162, Montreal 3, Que. Regular meetings, second Monday of each month, except June, July and August, Mount Royal Hotel, Montreal, Que.

CAR DEPARTMENT ASSOCIATION OF ST. LOUIS. — D. W. Kramer, Relay Depot Mail Room, East St. Louis, Ill. Regular meetings fourth Tuesday of each month except June, July and August, Hotel DeSoto, St. Louis, Mo.

CAR DEPARTMENT OFFICERS' ASSOCIATION. — F. H. Stremmel, 6536 Oxford Ave., Chicago 31, Ill.

CAR FOREMEN'S ASSOCIATION OF CHICAGO.—W. R. McCain, Mather Stock Car Company, 326 N. Michigan Ave., Chicago 1, Ill. Regular meetings, second Monday of each month, except June, July and August, LaSalle Hotel, Chicago, Ill.

CENTRAL RAILWAY CLUB OF BUFFALO.—R. E. Mann, Hotel Statler, McKinley Square, Buffalo 5, N. Y. Regular meetings, second Thursday of each month except June, July and August, Hotel Statler, Buffalo, N. Y.

EASTERN ASSOCIATION OF CAR SERVICE OFFICERS.—H. C. Rochester, Canadian National, 891 Notre Dame St., West, Montreal 3, Que. Next meeting, May 7-8, 1953, Wardman Park Hotel, Washington, D. C.

EASTERN CAR FOREMAN'S ASSOCIATION. — W. P. Dizard, 30 Church St., New York 7, N. Y. Regular meetings, second Friday of January, February, March, April, May, October and November, 29 W. 39th St., New York, N. Y.

LOCOMOTIVE MAINTENANCE OFFICERS' ASSOCIATION.—C. M. Lipscomb, 1721 Parker St., North Little Rock, Ark.

MAINTENANCE OF WAY CLUB OF CHICAGO.—E. C. Patterson, 400 W. Madison St., Chicago 6, Ill. Regular meetings, fourth Monday of each month, October through April, inclusive, except December, which is third Monday, at Eitel's Restaurant, Field Bldg.

MASTER BOILER MAKERS' ASSOCIATION. — A. F. Stiglmeier, 29 Parkwood St., Albany 8, N. Y.

METROPOLITAN MAINTENANCE OF WAY CLUB.—John S. Vreeland, Simmons-Boardman Publishing Corp., 30 Church St., New York 7, N. Y. Meets in February, April, October and December. Next meeting, February 19, 1953, Hotel Shelbourne, New York.

MILITARY RAILWAY SERVICE VETERANS. — J. E. McNamara, 332 S. Michigan Ave., Chicago 4, Ill. Annual meeting, September 18-20, 1953, New Orleans, La.

MISSISSIPPI VALLEY MAINTENANCE OF WAY CLUB.—P. E. Odom, 1008 Frisco Building, 906 Olive St., St. Louis, Mo. Regular meetings, second Monday of each month through May, DeSoto Hotel, St. Louis, Mo.

NATIONAL ASSOCIATION OF RAILROAD AND UTILITIES COMMISSIONERS.—Austin L. Roberts, Jr., 7413 New Post Office Bldg., Washington 4, D. C.

NATIONAL ASSOCIATION OF SHIPPERS' ADVISORY BOARDS.—J. W. Witherspoon, U. S. Rubber Company, 784 San Pedro St., S, Los Angeles 14, Cal. Annual meeting, October 6-8, 1953, Omaha, Neb.

NATIONAL DEFENSE TRANSPORTATION ASSOCIATION.—Miss Lois E. Casavant, 930 F. St., N. W., Washington 4, D. C.

NATIONAL INDUSTRIAL TRAFFIC LEAGUE. — L. J. Dorr, 909 Kass Bldg., Washington 5, D. C. Annual meeting, November 19-20, 1953, New Orleans, La.

NATIONAL RAILWAY APPLIANCES ASSOCIATION.—J. B. Templeton, Templeton, Kenly & Co., 1020 S. Central Ave., Chicago 44, Ill. Lewis Thomas, Asst. Secy., 59 E. Van Buren St., Chicago 5, Ill.

NATIONAL SAFETY COUNCIL, RAILROAD SECTION.—F. R. Callahan, Pullman Co., Merchandise Mart Plaza, Chicago 54, Ill.

NEW ENGLAND RAILROAD CLUB.—William M. McCombs, 35 Lewis Wharf, Boston 10, Mass. Regular meetings, second Tuesday of each month, except May, June, July, August and September, Hotel Vendome, Boston, Mass.

NEW YORK RAILROAD CLUB.—C. T. Stansfield, 30 Church St., New York 7, N. Y. Regular meetings, third Thursday of each month, except June, July, August, September and December, Century Room, Commodore Hotel, New York, N. Y. Reception, 6 P.M.; dinner, 7; meeting, 8:15. February meeting, fourth Thursday, February 26.

NORTHWEST CARMEN'S ASSOCIATION.—G. H. Wells, Northern Pacific Railway, St. Paul 1, Minn. Regular meetings, first Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

NORTHWEST LOCOMOTIVE ASSOCIATION. — R. M. Wigfield, Northern Pacific Ry., Room 1134, G. O. Bldg., St. Paul 1, Minn. Regular meetings, third Monday of each month, except June, July and August, Midway Club, 1931 University Ave., St. Paul, Minn.

PACIFIC RAILWAY CLUB. — S. E. Byler, 121 E. Sixth St., Los Angeles 14, Cal. Regular meetings, second Thursday of each alternate month at Sir Francis Drake Hotel, San Francisco, Cal., and Elks' Temple, Los Angeles, Cal.

RAILROAD PUBLIC RELATIONS ASSOCIATION.—J. Don Parel, Association of American Railroads, Transportation Bldg., Washington 6, D. C.

RAILWAY BUSINESS ASSOCIATION.—P. H. Middleton, 38 S. Dearborn St., Chicago 3, Ill.

RAILWAY CLUB OF PITTSBURGH.—G. E. Morrison, act. sec'y., 2710 Koppers Bldg., Pittsburgh 19, Pa. Regular meetings, fourth Thursday of each month, except June, July, August, September and December, Fort Pitt Hotel, Pittsburgh, Pa.

RAILWAY ELECTRIC SUPPLY MANUFACTURERS' ASSOCIATION.—J. McC. Price, Allen-Bradley Company, 445-447 N. LaSalle St., Chicago 10, Ill.

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RAILWAY SUPPLY MANUFACTURERS' ASSOCIATION. — A. W. Brown, 60 E. 42nd St., New York 17, N. Y. Exhibit in conjunction with meetings of the Mechanical Division and Purchases & Stores Division, A.A.R., June 22-27, 1953, Convention Hall, Atlantic City, N. J.

RAILWAY TELEGRAPH AND TELEPHONE APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with Communications Section of A.A.R.

RAILWAY TIE ASSOCIATION. — Roy M. Edmonds, 1221 Locust St., St. Louis 3, Mo.

ROADMASTERS AND MAINTENANCE OF WAY ASSOCIATION.—Miss Elise La Chance, Room 901, 431 S. Dearborn St., Chicago 5, Ill. Annual meeting, September 15-17, 1953, Conrad Hilton Hotel, Chicago, Ill.

ST. LOUIS RAILROAD DIESEL CLUB.—F. C. Whitlock, Terminal Railroad Association of St. Louis, 376 Union Station, St. Louis 3, Mo. Regular meetings, second Tuesday of each month, Hotel York. Dinner, 6:45 P.M., meeting, 8.

SIGNAL APPLIANCE ASSOCIATION. — G. A. Nelson, Waterbury Battery Company, 30 Church St., New York 7, N. Y. Meets with A.A.R. Signal Section.

SOUTHEASTERN RAILWAY DIESEL CLUB. — H. W. Brewer, Seaboard Air Line, Jacksonville, Fla. Regular meetings, second Tuesday in February, April, June, August, October and December, 9:30 a.m., Mayflower Hotel, Jacksonville, Fla.

SOUTHERN AND SOUTHWESTERN RAILWAY CLUB. — A. T. Miller, 4 Hunter St., S. E., Atlanta, Ga. Regular meetings, third Thursday in January, March, May, July, September and November, Ansley Hotel, Atlanta, Ga.

SOUTHERN ASSOCIATION OF CAR SERVICE OFFICERS.—F. I. Umhau, Southern Ry., Atlanta 3, Ga.

TORONTO RAILWAY CLUB.—J. A. North, P.O. Box 8, Terminal "A," Toronto 2, Ont. Regular meetings, fourth Monday of each month, except June, July, and August, Royal York Hotel, Toronto, Ont.

TRACK SUPPLY ASSOCIATION.—Lewis Thomas, Q and C Company, 59 E. Van Buren St., Chicago 5, Ill. Exhibit in conjunction with the meetings of the American Railway Bridge & Building Association and the Roadmasters & Maintenance of Way Association, September 14-17, 1953, The Coliseum, Chicago, Ill.

WESTERN RAILWAY CLUB.—E. E. Thulin, Suite 339, Hotel Sherman, Chicago 1, Ill. Meetings scheduled for February 16, March 23, April 20, May 18, 1953, Hotel Sherman, Chicago, Ill.

WESTERN ASSOCIATION OF RAILWAY TAX COMMISSIONERS.—M. L. Boydston, 516 W. Jackson Blvd., Chicago 6, Ill. Regular meetings, 12:15, first Wednesday of each month, except July and August, Traffic Club, Palmer House, Chicago, Ill. Annual meeting, February 10, 1953, Palmer House, Chicago, Ill.

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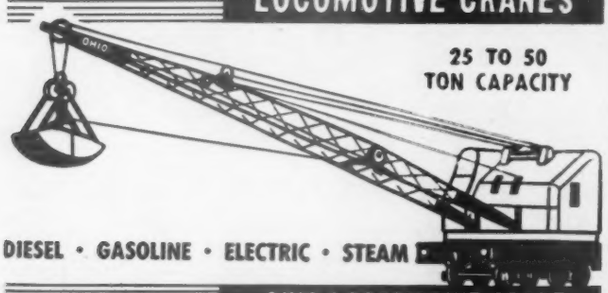

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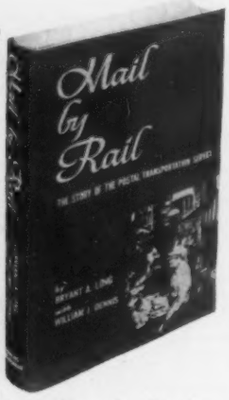

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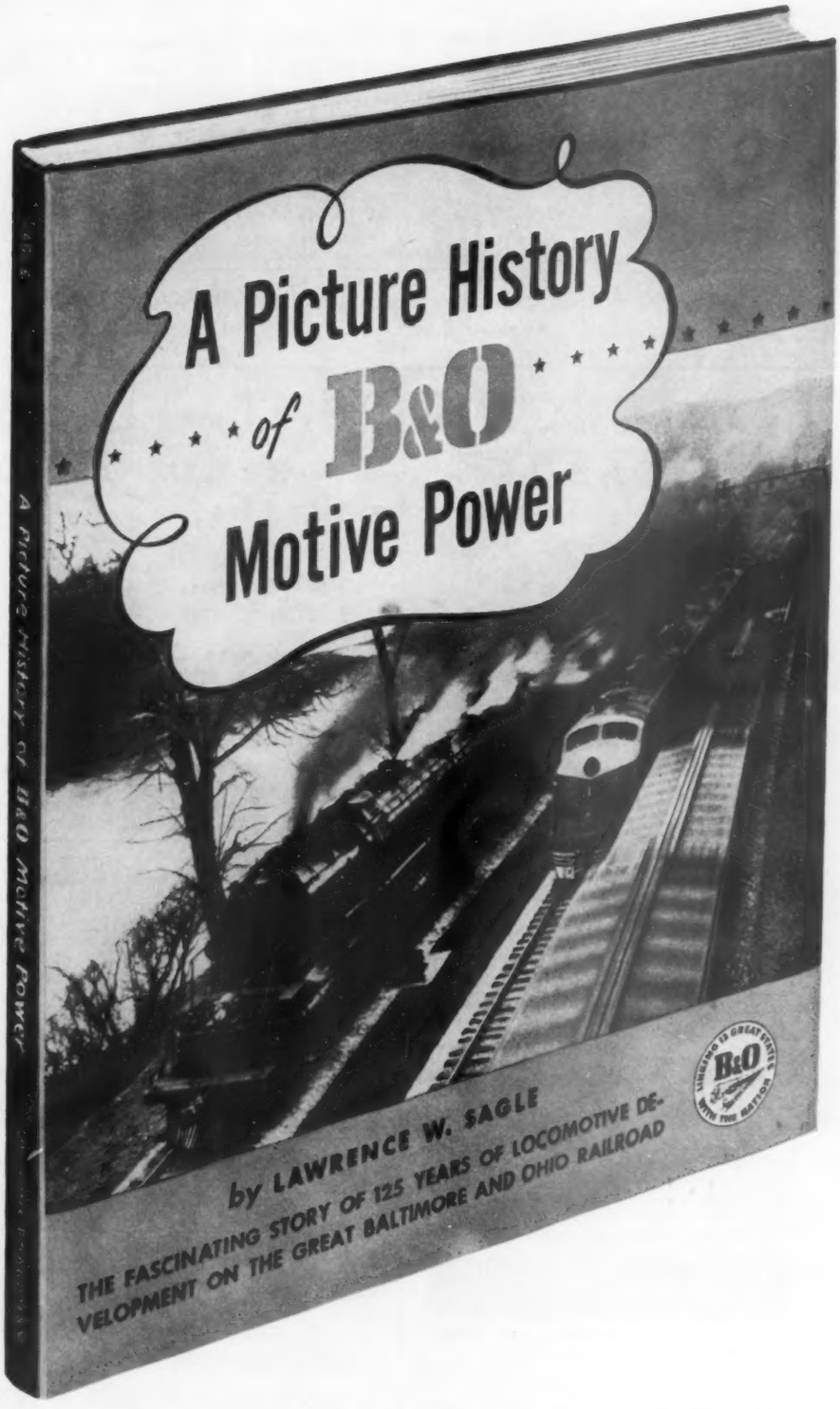
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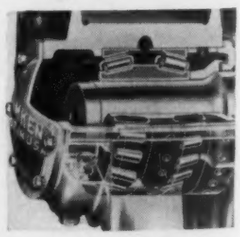

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